DOCUMENT RESUME

ED 050 369 CG 006 369

TITLE	The Fort Logan Lodge: Intentional Community for Chronic Mental Patients. Final Report.
INSTITUTION	Fort Logan Mental Health Center, Denver, Colo.
SPONS AGENCY	National Inst. of Mental Health (DHEW), Bethesda, Md.
PUB DATE	Apr 71
NOTE	199p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$6.58
DESCRIPTORS	*Community Health Services, Group Experience, *Group Therapy, *Mental Health Programs, *Psychiatric Services, Rehabilitation, *Rehabilitation Programs, Vocational Rehabilitation
IDENTIFIERS	Denver, Colorado

ABSTRACT

This report attempts to identify important variables affecting the success of the Lodge Program, affiliated with the Fort Logan Mental Health Center. The Lodge Program is a community based, group oriented, social and work program for the rehabilitation of the refractory, long stay mental patient. Findings reported include the following: (1) the referrals were some of the most chronic patients at the hospital; (2) no statistically significant differences among treatment teams regarding knowledge, behavior, and attitudes toward the Lodge were found to be related to referrals, the number of men who were rejected, the number who refused to enter or those who joined the Lodge; and (3) with the exception of the vocational rehabilitation counselors, the attitude on the part of treatment personnel was only slightly favorable. In general, leadership among the Lodge membership was found necessary for the group to respond more effectively to the social and work tasks it faced, and the vitality of the Lodge community seemed largely contingent upon positively influencing the variables that influence leadership. (Author/TA)

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THE FORT LOGAN LODGE: INTENTIONAL COMMUNITY FOR CHRONIC MENTAL PATIENTS

FINAL REPORT
NATIONAL INSTITUTE OF MENTAL HEALTH
U.S. PUBLIC HEALTH SERVICE
GRANT NO. 1 RO1 MH15853-02

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Glenn W. Gregory, Senior Research Assistant

FORT LOGAN MENTAL HEALTH CENTER
Denver, Colorado

APRIL, 1971

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ACKNOWLEDGEMENTS

The research reported in this paper owes a great deal to the support, efforts and contributions of several people not directly affiliated with the project. Grateful recognition is herewith given to some of those individuals. Dr. Donald Miles, former Chief, Vocational Services Department at Fort Logan, introduced the idea of the Lodge to Fort Logan and nurtured its development. Dr. Ethel Bonn, Director, and Dr. John Aycrigg, Associate Hospital Director, of Fort Logan Mental Health Center gave their approval and continuing support to the project. Dr. Paul Binner, Chief of Research at Fort Logan, made available data from the Fort Logan Record System. Mrs. Ethel Truitt carried out Dr. Binner's support by prompt and thorough help and service when she was asked to do so. The Fort Logan Medical Records Staff also was cooperative whenever needed. By its financial sustenance the Colorado Division of Rehabilitation gave crucial help in making the Lodge concept a reality. This underpinning of the program was executed by Thomas B. Dillingham, Chief of Vocational Rehabilitation Services, and Kenneth Hutcheson, Supervisor of the Fort Logan District office. The continual cooperation and support of the program by these individuals was most helpful.

Particularly helpful in administering the Staff Questionnaire on the Lodge Program were Dr. Aycrigg and Harold Berberick, Assistant Chief of Vocational Services Department. The secretary of the Vocational Services Department, Mrs. Betty Lusky, rendered continual valuable help to the study. The Vocational Rehabilitation Counselors regularly contributed useful data to the project.

In the last analysis the success of this research depended on the Lodge members themselves and their Business Manager, Jack Gardner. Almost without exception they gave their friendly and serious cooperation.

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INTRODUCTION

The Lodge program affiliated with the Fort Logan Mental Health Center in Denver, Colorado, is a community based, group oriented, social and work program for the rehabilitation of the refractory, long stay mental patient. It began in July, 1967, and was developed on the basis of principles derived from a prototype project developed at the Palo Alto (California) Veterans Administration Hospital by G. W. Fairweather and his associates. As of December 31, 1970, 48 chronic male patients from Fort Logan had participated in the program. It is now organized as a non-profit corporation called Labor Saver Service, Incorporated. For convenience, the program will be referred to in this paper as the Fort Logan Lodge, or simply, the Lodge.

The research reported in this paper represents an attempt to identify important variables affecting the success of the Lodge and to evaluate the outcomes and processes of the program. It is also an effort to extend the implications of Fairweather's research. The discussion will proceed in the following order. First, a review of the problem will be presented; second, the origin of the Lodge program as a means for rehabilitating psychiatric patients will be considered; and third, the development of the Fort Logan Lodge will be presented. Then, departing from matters related to the functioning of the Lodge, the general plan of the research evaluation and the research objectives will be presented. The last three sections of the paper will describe the methods employed, report the results obtained and present conclusions that seem to be indicated by these results.

Review of the Problem

The treatment and rehabilitation of the chronically mentally ill has generated discouraging and continuing problems even in the face of innovative treatment methods. An important study in this area has indicated that in a Veterans Administration Hospital setting 70% of those patients with a history of chronicity who are discharged return to the hospital within 18 months after discharge, and a small proportion do not leave the hospital at all (Fairweather, 1964).

In the past few years, several research or evaluation projects have been completed in order to study this problem. Vitale (1964) made a comprehensive literature review and has described some of the issues involved in the treatment of chronic patients as well as some promising solutions to these problems. The following is a summary of his review:

1. A major problem in psychiatric hospital treatment is that of dealing with the refractory chronic patient.

2. While innovations over the past decades in hospital programs and treatment techniques have brought about an increased discharge rate of patients with acute emotional disorders, including acute psychoses, no equivalent increase in discharged patients with chronic illness has been realized. Chronic psychiatric patients consistently demonstrate the poorest post-hospital adjustment.

3. Attitudes of the staff toward the chronic patient and the social milieu in which therapy takes place exert a significant, and often detrimental, influence on the treatment and rehabilitation of these patients. Frequently, the chronic patient learns to conform and to assume a subordinate status to the treatment staff. Such processes may increase his dependency upon the institution rather than helping him to move toward eventual self-sufficiency in the community.

4. The patient's usefulness as his own "therapeutic agent" and the rehabilitation potential inherent in patient groups has often been underrated and probably never fully utilized.

5. Small group approaches seem to offer the most promising possibilities in the effort to provide effective treatment and rehabilitation for the chronic patient. The approach offers the patient opportunities to participate in a therapeutic social situation. Moreover, from a research viewpoint, small group processes may be investigated, systematically and concretely described, and generalized to other treatment and rehabilitative facilities in the community.

Studies done subsequent to Vitale's review, but prior to development of the Fort Logan Lodge corroborated Vitale's analyses. Ludwig and Farially (1966) and Shaver and Scheibe (1967) have demonstrated a relationship between staff attitudes and subordinate, dependent patient roles. Hoyt, Repcik and Brown (1967) noted that chronic patients become free of their symptoms, but develop dependence on the institution to such an extent that they lose their will to provide for their physical and social needs. In addition, the patient's former work skills are eroded. Reissman (1965) and Query (1966) provided an important study of the "therapeutic" potential inherent in patient peer group relationships.

One study not included in Vitale's review, one which is particularly important to the present project, was conducted at Johns Hopkins University by Wheat, Slaughter and Frank (1959). These authors found that action oriented, structured group techniques evoke a more positive response from the chronic patient than conventional, verbal, group psychotherapy.

The benefits of a socially supportive post-hospital living situation in fostering community adjustment of the chronic psychiatric patient have been demonstrated by several studies; for example, see those by Fox (1966), Hodgman and Stein (1966), Schmidt (1966) and Becker (1967).

Daniels (1966, 1967) pointed out the advantages of combining a peer group approach with the benefits demonstrated in work for pay (LaFave, 1965, and Esser, 1967) in his conceptualization of an "intentional social system." Daniels has summarized the common elements in programs based on intentional social systems as follows: (1) they demonstrate that poor-risk groups or individuals can perform satisfactorily and may even perform beyond what is expected; (2) they reject the usual assumptions about competence, readiness and capability of mental patients or marginal people; (3) they usually assume the value of real work for real pay; (4) they treat work as a part of the restoration process and, in doing so, concentrate on adjusting to and minimizing the impact of disabilities and maximizing abilities; (5) they demonstrate that expectations and attitudes greatly determine performance and outcome; and, (6) they demonstrate that the best place to measure ability and desire to work is on the job. Moreover, in such special social systems, the patients have available--and tend to use--opportunities to solve the problems that arise among themselves. They also learn to deal effectively with their customers and neighbors. In these ways both patients themselves--as well as segments of the general citizenry--become involved in the restoration process.

Origins of the Lodge Program

It is interesting to note that the principles advocated in the intentional community approach are parallel to the principles reported by Fairweather and his associates (Fairweather, 1964; Fairweather, Sanders, Maynard and Cressler, 1969). Fairweather's work is considered by some to be a milestone of research in the area of the rehabilitation of chronic mental patients. He postulated that the chronic patient, in adjusting to the social system of the hospital,

had assumed a dependent, "sick," and irresponsible social role of "mental patient." When, in the role of "ex-patient," he feared and/or experienced isolation and discrimination in the community, the difficulty of making an independent adjustment was compounded. In order to facilitate the transition from dependency in the hospital to independence in the community, Fairweather attempted to establish conditions that might encourage patients to organize themselves into small cohesive groups with the task of providing mutual care and assistance for their members. In this way patients were able to assume new roles before leaving the hospital and to receive support from others in a small group situation. He compared patients treated with traditional methods in a Veterans Administration Hospital program to those whose treatment consisted of working in small, autonomous task groups while in the Veterans Administration Hospital. He found a significantly shorter length of hospital stay for the latter group. Moreover, the patients in the small group program demonstrated a significantly better adjustment to the community in terms of their employment, verbal communication with others and friendships. Unfortunately, however, the rate of recidivism for the two treatment programs was roughly the same.

Although Fairweather's small group treatment method was not successful in maintaining chronic patients in the community, some findings emerged as a by-product of the study which have important implications for the question of rehabilitation. Sanders, one of Fairweather's co-workers on the project, reported that: (a) post-hospital adjustment correlates with no form of hospital behavior, but is highly related to the post-hospital situation to which the patient returns, and (b) patients who remain out of the hospital the longest are those who have a socially-supportive living situation and who are more frequently employed, specifically in a low status job. Sanders concluded from

these findings that "it seems...necessary to move this successful hospital social system into the community where the task groups would be presented with the problems of maintaining themselves in a productive and supportive community situation...the recidivism rate would be reduced, employment increased and the patients' life situations enhanced." (Sanders, 1966, p. 2.)

In order to test this postulate empirically, Fairweather, Sanders and their co-workers, in conjunction with the Veterans Administration Hospital in Palo Alto, California, organized such a task group in a former motel building located in the San Francisco area (N.I.M.H. Grant No. 3-R11 MH01259). The program known as the "Lodge" was organized in 1964. The Palo Alto Lodge experiment covered a period of 36 months. During this period a total of 75 male patients participated in the program for varying lengths of time. The majority of these patients were diagnosed as schizophrenic reaction. The remainder were diagnosed as alcoholic or character disorder. These patients organized a social-business system for accomplishing tasks of housekeeping and bookkeeping while participating together in jobs of janitorial and yard work in the community. The patients solicited the work themselves. During the three years of the study, the men in the Lodge worked almost continuously, performing nearly three thousand jobs. During this time their collective income was $52,000.

Patients in the Palo Alto Lodge group were compared with a matched group of patients receiving traditional Veterans Administration Hospital follow-up care--such as outpatient treatment. The two groups were compared on rate of recidivism, days spent back in the hospital during the follow-up period, and on report of self-enchncement. Both groups received the same in-hospital treatment. At the end of the first six months of the project 65% of the Lodge group had remained in the community for at least 75% of the time, as compared to 24%

remaining in the community for the control group. Fifty per cent of the Lodge group were employed for at least 75% of the initial six months, as compared to only 3% for the matched control. Significant differences between the two groups were also obtained for the 12, 18, 24, 34 and 40-month follow-up periods.

During the 36 months of the Palo Alto Lodge's existence, it was found that approximately one-third of the newly arriving Lodge members had to be rehospitalized during the first two weeks of their stay. A second third of the patients who lived successfully at the Lodge, made the decision to return to the general community. A very high proportion of these patients failed to adjust to the community and required readmission to a hospital treatment program. The remaining one-third, those who lived and worked at the Lodge, continued to maintain a successful adjustment in their social interactions with each other, in their janitorial work and in getting along with other people in the community. This was true as long as they remained in the program. Thus, it was hypothesized that the Lodge cannot be expected to restructure the patient's ability to adjust to the community, but that it can structure a community living situation to which chronic patients can adjust.

Follow-up interviews revealed that patients who were successfully adjusted to the Lodge had a more positive self-image when compared to patients maintaining a borderline adjustment to the larger community. It also should be noted that the burden of repeated hospitalization is not only costly to the patient's self-respect, but is enormously costly to the state in expenditure of tax money and the energy of trained professionals. To maintain a patient in the Palo Alto Lodge cost less than half of the state hospital maintenance. This expense was further deferred through the collective earnings of the Lodge members themselves. These earnings brought the daily cost per person down to

$3.35 (Fairweather, 1969). Perhaps most significant, the Lodge members generally took great satisfaction in their situation, and when research support funds ran out, several agreed to continue in the Lodge as an entirely self-supporting operation.

Unfortunately, only five of the 75 persons in the Palo Alto Lodge sample remained in the program for the entire three year period, suggesting that further research was indicated to determine whether some modifications in the situation or more careful selection of participants might increase individual tenure in the program. However, the fact remains that during their tenure in the community based program, the members of this Lodge prototype achieved significantly greater community adjustment than their matched controls when compared on length of employment, earnings, community tenure, socialization and self-esteem.

Several principles and operating procedures were established during the development of the Palo Alto Lodge. Five variables were identified as important in developing task oriented, autonomous groups: (1) meeting without staff present (autonomy of group action); (2) heterogeneity of social activity (groups composed of members varying in social activity); (3) immediate rewards and punishments--a simple system directed to the group; (4) a meaningful task; and (5) communication systems that present the group with problems and facts but do not involve staff members in decision making. Research showed that leaders of the task groups were drawn from all diagnostic groups and all degrees of chronicity. Social activity was found to be so potent a variable in determining leadership that chronicity became relatively unimportant.

Experience indicated that a heterogeneous group composed of about one-half verbal, socially-active patients with leadership potential and one-half withdrawn, inactive individuals was most conducive to effective group operation.

Moreover, chronic alcoholics and character disorders were most often found to meet the sociability and leadership requirements. In this way, members for the Lodge were chosen in order to achieve a socially heterogeneous group. After living and functioning together in a task-oriented group in the hospital for a few weeks, the group was moved into living quarters in the community. One month additional time was necessary in the community for the group to develop the basic organizational structure of the Palo Alto Lodge. Initially, a professional was involved to initiate and coordinate the group functioning and to be responsible for coordinating the work aspects of the Lodge, such as job procurement, chairing meetings, bookkeeping, etc. However, in time, nearly all of the leadership functions were assumed by the patients and eventually no professional personnel were involved except as consultants.

Development of the Fort Logan Lodge

It was during the latter phases of the Palo Alto experiment that Fort Logan became acutely aware of a rapidly growing population of chronic patients on its treatment rolls. Kraft, Binner and Dickey in 1967, documented the difficulty in preventing the accumulation of chronic patients at Fort Logan.

Fort Logan is a relatively new state mental health facility which has been cited by the National Institute of Mental Health (1964), the American Psychiatric Association (1964) and other authorities as an outstanding example of an innovative mental health center and as a prototype for new mental health facilities developing in the future. The description of the program at Fort Logan including its history and development is presented elsewhere (Kraft, 1965; Kraft and Bonn, 1963; Kraft and Lewis, 1962).

It is noteworthy that even though Fort Logan has attempted to be innovative in its treatment program and has been particularly concerned about treating the

chronic patient since its inception in 1961, the study by Kraft, Binner and Dickey (1967) clearly indicates that the backlog of "readmitted" or "continuous stay" long-stayers is quite high. Gaviria (1967) in a follow-up study of patients discharged prior to 1962, found that 50% of those discharged had been rehospitalized. According to Kraft, et al., on June 30, 1965, 16% of the patients enrolled in treatment in the Adult Psychiatric Division had been in some type of treatment program continuously for two years or more, and 40% had been in treatment for at least one year. At that time, it was anticipated by these authors that in the near future the proportion of patients who would have been on the treatment rolls at Fort Logan for a year or more would exceed 50% of the total patient population. They also point out that the problem of effectively treating the chronic patient not only has important implications for the state hospital but has ramifications for newly developing community mental health centers, and for the "social cost" of maintaining the chronic patient in the community.

As Fort Logan became acutely aware of the problem of treating the chronic patient and reducing the backlog of "long-stayers," new efforts were made to deal with the problem. The encouraging results of the Palo Alto Lodge program led to the establishment of a similar program at Fort Logan. While the Fort Logan Lodge program closely followed the effective philosophy and organization used at Palo Alto, attempts were made to overcome some of the problems encountered in that original program.

One of the problems of the Palo Alto Lodge was financing. The program was supported for three years by a National Institute of Mental Health grant administered by a university in the area. However, when the grant terminated, the project was without funds to continue. Neither the Veterans Administration Hospital nor the university chose to support the Palo Alto Lodge beyond the original period of the research grant.

In order to avoid a similar problem for the Fort Logan Lodge, its founders made funding their first order of business. They negotiated a contract with the Colorado Division of Rehabilitation. Under this contract the Lodge was to receive an allowance of $220 a month for each man who became a member--$125 for personal maintenance plus $95 for rehabilitative training.

One additional strength of the Lodge was the fact that it was established as a program within the Fort Logan Vocational Services Department. The founders were employees of that department. Thus, the viability of the Lodge program has been a concern not only of those directly responsible for it, but also of the Vocational Services Department.

With the status and funding of the Lodge established, the next step was to establish the criteria by which patients could be referred to the Lodge. After much conferring with hospital personnel, especially team staff members of the psychiatric and alcoholism treatment teams, a set of criteria was agreed upon.

Using the Palo Alto experience as a guide, an important ingredient of the Lodge concept was the establishment of a group composition that would allow for emergence of leadership necessary for the development of an autonomous group capable of functioning as a business enterprise. Hence, there was a need to include those patients who were relatively socially active along with those who were withdrawn and inactive.

Therefore it was important that the concern for meeting the "therapeutic" need of the long-stay patient be balanced against the need to establish a desirable group composition. The following criteria represented an attempt to satisfy both objectives:

1. <u>Long stayer</u>

   a. One year or more continuous tenure at Fort Logan.

   b. Schizophrenic (priority given to chronic, undifferentiated and hebephrenic).

2. Long stayer other than schizophrenic

   a. One or more years' continuous tenure.

   b. Single.

3. Readmissions

   a. Two or more readmissions to any psychiatric institution.

   b. Accumulation of six months or more hospital time.

   c. Poor prognosis for competitive employment upon return to community; or,

   d. If an individual had only one readmission, he must have resided in Fort Logan or another institution for at least one year during his previous admission.

4. Alcoholics

   a. Readmitted two or more times to Phase I or IIA at Fort Logan or readmitted two or more times to an in-hospital alcoholic treatment program elsewhere.

   b. Readmission directly associated with an incapacity to function in competitive employment and in an independent living situation.

An assumption running throughout these criteria is that the clinical staff deems there is no better alternative treatment program available for the candidate, either in the institution or in the community.

Group 1, therefore, was composed of those individuals who were known to be long stayers or treatment failures from previous studies (Kraft, et al., 1967). Group 2 were those empirically defined as long stayers, but not clearly identified by previous studies. Groups 3 and 4 represented chronicity problems manifested by failure to function adequately in the community, but were not considered to be of the same magnitude as Groups 1 and 2. While seeming to need a specialized program they could not be clearly identified as long stayers at that point.

In using the criteria to identify eligible patients, a very careful and painstaking process was carried out between Lodge staff and team staff. This

process produced 19 men eligible to become Lodge members. These men were apprised of the plan and were given the opportunity to become "charter" members of Fort Logan's first Lodge. Referral to the Lodge was then--and is now--voluntary. Eventually 15 of the 19 men selected decided they would join the Lodge.

Thus far in this report, the discussion has briefly dealt with the origins, funding, organizational status, development of guidelines for choosing members, and the actual recruiting of the first 15 men. The next few paragraphs will describe how the project worked.

To put the program into motion, during the month prior to moving into the Lodge residence the patients remained in their existing room and board facilities (usually the hospital) while engaging in daily janitorial work activities as a group. These activities provided a focal point for developing group cohesion, leadership and organization. A member of the Vocational Services staff at Fort Logan assumed the role of Business Manager and assisted the men in soliciting initial work contracts in janitorial and yard work. Also, a professional group worker was hired to assist the patient group in developing into a cohesive social and work unit. During this same period provision was made for one Fort Logan psychiatrist to provide whatever psychiatric and medical services the Lodge members would need.

Within about a month after the men had decided to participate in the new Lodge project, a suitable residence near downtown Denver was found. Across the alley from the residence was a boarding house where the men could go for their meals. After finishing essential cleaning, repairs and some redecoration, the men moved into their new home on July 17, 1967.

After moving into the Lodge, the group chose work crews. The crews were then assigned to the jobs in the community that had been located by the staff

member. The group worker continued to work with the members to assist them in developing further group skills and autonomy. A house manager was hired to be available in the evenings and on weekends for any emergency situations. However, group responsibility for maintaining discipline and problem solving had developed. Moreover, certain members began to assume some leadership functions in business operation and group management.

In keeping with the conviction that patients possess rehabilitative resources of their own, the management of the Lodge was gradually turned over to the members. An early and rather surprising development was a decision by the men to hold a meeting at eight o'clock five mornings a week. The purpose of these meetings was to get the men on their feet and ready for work and to facilitate work assignments. The Lodge also set up a business meeting for every Friday afternoon. Bringing up and settling complaints and problems were encouraged at all meetings. This rather extensive and often very intensive experience with group processes is one that is peculiar to a group living situation such as the Lodge. Thus, the members are engaging in a rather unique type of daily social activity not generally available to most people.

After about six months, the house manager and group worker positions were abolished. The Business Manager's duties were (and are) to seek work contracts for the men, look after the finances, and act as a liaison between the Lodge and Fort Logan. His duties also include the continual effort to avoid doing any kind of counseling, except to remind any petitioner that advice and recourse must come from the group. The Business Manager's central goal was (and is) to turn over to the men every part of the responsibility for all functions, including the solicitation of work and management of finances. This objective is much easier to state than it is to realize. The men have solicited and obtained

a limited number of jobs. They make up the payroll. However, for the most part the Business Manager solicits and obtains work and does the bookkeeping and overall management of the Lodge funds.

After living in their original residence for their first year together, many of the men became dissatisfied with it. They wanted a larger and more pleasant place to live. With the active help of the Business Manager, they found, leased, cleaned and moved into another building. The move was not without great conflicts; some resisted it bitterly. However, the will of the majority prevailed; and the move was made. In the new quarters the members decided to prepare their own meals. For this purpose they assigned two men to make the cooking their Lodge work and responsibility.

During this general period of time, the group gained sufficient skill in managing its affairs that it was decided that it would be advantageous for the Lodge to become an entity almost completely separate from Fort Logan. The idea was discussed with the men and they decided that they were ready to assume more responsibility for the business. This new status was achieved by organizing the Lodge into a non-profit corporation formed for the purpose of operating the Lodge as a janitorial business. A Board of Trustees for the new corporation--made up of business and professional leaders from the community--was formed. It was chosen not only as a policy making body for the Lodge but also to assist the members with certain problems. For example, one Trustee is a lawyer. He volunteers his services when the men need legal counsel.

With respect to the problem of finding work for the Lodge members, the Business Manager was able to negotiate two contracts that provided the members with steady work for an average of about four hours a day, five days a week. One contract negotiated early in the Lodge's history was with the

Veterans Administration property management representative. Under this agreement the Lodge workers remove trash from repossessed VA-insured homes. The other contract is with a private company that is responsible for cleaning Denver Mile High Stadium after baseball and football games. The stadium crew from the Lodge works under two of its own members. These straw bosses were chosen by the general superintendent on the job to supervise the work of the Lodge members. In addition to these contracts, the men get miscellaneous clean-up jobs in response to an advertisement in the two daily papers. An additional source of work has been the Workshop at Fort Logan. When other jobs are not available or on days when the weather is bad, the Lodge men work on Workshop contracts (doing so on their own premises and not at the Workshop).

Finally, it may be noted that some of the men have developed relationships with individuals and institutions (such as churches, YMCA, etc.) in the community. Within the Lodge facility, various strong individual relationships have formed, many of the men have developed recreational activity and the Lodge group has obtained two mascots, a cat and a canary.

Research Objectives

At the time the Lodge was opened plans were made for a research evaluation of the program. A pilot study was undertaken to determine the feasibility of using various questionnaires and rating scales for collecting data on the members and the group. Data were collected for a period of 12 months. The results of this work are reported in Hunt (1968). Among the findings was evidence that while the Fort Logan Lodge, like its Palo Alto prototype, seemed to have a beneficial effect on the men as long as they were members, it might suffer similar high attrition rates. This finding, along with the recognition

that more knowledge was needed concerning numerous individual and group variables associated with the operation of the Lodge program, provided the basis for the present research. Greater awareness of such variables as referral to the Lodge, becoming a member, functioning in the group and leaving the Lodge could provide bases for beneficial manipulation of these outcomes. Hopefully, greater awareness of these variables might make possible more appropriate selection for the program, promote growth and satisfaction of the members, enhance tenure and perhaps, foster post-Lodge adjustment in the community.

To facilitate investigation of the progarm, the conceptual model formulated by Kelly, Beggs and McNeil with Eichelberger and Lyon (1966) was used as the general research model for this study. In the tradition of Tolman and Lewin, these authors hypothesize that behavior (B) is a function of individual or personal characteristics (P), contextual or situational variables (S) and task variables (T). Thus, the general formula: $B=f(P, S, T)$.

The present research was concerned with five basic categories of behavioral criteria regarding the Lodge program. These were: referral to the program, entry into the program, the performance of Lodge members, exit from the program and post-exit functioning.

In addition to providing an empirical description of the group and individual dimensions of the Lodge program, the research was designed to answer three basic questions.

1. What relationship, if any, exist between selected personal characteristics of Lodge candidates and Lodge members and the five criterion variables of referral, entry, performance, exit and post-exit functioning?

2. What relationships exist between selected contextual or situational variables and the five criteria?

3. Is behavior during Lodge membership more (or less) productive and constructive than behavior prior to and after Lodge membership?

Operational definition of "task" variables proved to be elusive, as consensual agreement could not be reached regarding variables to be included in this category which could not also be considered personal and situational variables. Thus, the present study examines the criterion measures only in terms of personal and situational influences.

METHODS

Subjects

To provide information relative to the basic research questions, three groups of subjects were used. The first group included all Fort Logan patients who were referred to the Lodge from its inception on July 17, 1967, to December 31, 1970--a total of 67 men. This group of subjects consisted of chronic patients selected on the basis of the criteria described previously, and ranged in age from 22 to 62, with a mean age of 33 years. Forty-six of these subjects were diagnosed as schizophrenic. Nine were diagnosed as alcoholic and 6 were diagnosed as brain damaged or mentally retarded. The range of education for these men was from 6 to 18 years (M.S. degree), with a mean of 10 years. Pre-hospital occupations varied in status from unskilled labor to professional pursuits. Generally, speaking, the men were employed only sporadically prior to becoming patients at Fort Logan with none of them being employed at time of admission to the hospital and none employed at time of referral to the Lodge.

The second group of subjects was a random sample of 102 adult Fort Logan patients drawn from hospital rolls for the period, July 1, 1967 to August 31, 1970. This sample ranged in age from 18 to 68, with a mean age of 37. The entire range of diagnostic categories was included in this sample. Schizophrenia was diagnosed for 28% of the sample, Chronic Brain Syndrome for 26%, Personality Disturbance for 23% and Chronic Alcoholism for the remaining 14% of this random sample. This sample was used to provide a representative patient group with which to compare the Lodge participants for descriptive and analytical purposes related to referral to the Lodge.

The third group of subjects consisted of 94 of the Fort Logan staff members on the Adult Psychiatric and Alcoholism Teams (August, 1970). This group included Mental Health Workers, Nurses, Psychiatric Technicians, Psychiatrists, Psychologists, Social Workers, Vocational Counselors and Activity Therapists. This sample was used to provide information regarding certain contextual variables that might be related to the process of referring candidates to the Lodge program.

Variables

Criterion Variables

The reader may recall that the criterion variables were classified into the following five categories: (1) referral to the Lodge, (2) entry into the Lodge, (3) performance in the Lodge, (4) exit from the Lodge and (5) post-exit functioning. The operational definitions of these variables are described below.

1. Referral to the Lodge. This variable was operationally defined in two ways. When used as a dependent variable to personal characteristics such as Mental Status or Demographic attributes, it was defined simply as a "yes" (referred) or "no" (not referred) individual S's score. On the other hand, when used as a dependent variable to a Fort Logan team, it was operationally defined as the ratio of a team's referrals to the total number of patients on the team who met the criteria for selecting Lodge candidates. The denominator for these ratio scores was computed from the Fort Logan Record System for the period July 1, 1969 to August 31, 1970.

2. Entry into the Lodge. This category includes referrals who were rejected by the Lodge (Rejects); those who were accepted but who, on second thought, decided not to join (Refusers); and those who joined (Members). All

three of these specific criterion variables were operationally defined by a "yes" (Reject, Refuser, Member) or a "no" (not rejected, not a refuser or not a member) score for each individual S. This "yes" or "no" scoring was used in all analyses involving these variables except one case: when they were used as dependent variables in tests involving the Fort Logan teams. In this case they were operationally defined as ratio scores computed exactly as were Referrals.

3. Performance in the Lodge. This category of criterion variables includes the following specific variables: Portion of Total Monthly Earned Income (INCOME) and tenure in the Lodge (TENURE). INCOME was operationally defined as a S's total earned income during the month divided by the total earned income of the Lodge for the period during the month that the S was a member of the Lodge. For example, if a S entered the Lodge on May 20th, his income from Lodge work (from May 20 to May 31) would be divided by the total Lodge income for the same period. This kind of ratio score was used to render all monthly scores comparable regardless of dates of entrance to--or exit from--the Lodge.

TENURE was the length of time a S remained in the Lodge. This length of stay was scored by use of 6 periods by number of days; viz., zero (Rejects and Refusers), from 1 to 61 (1-61), 62-213, 214+, 214-547 and 548+. TENURE was defined as a S's score of "no" (not in a certain period) or "yes" (in a certain period). For example, a S who entered the Lodge on May 20, 1969, and left on January 8, 1970 (234 days) would be scored as follows: zero/no, 1-61/no, 62-213/no, 214+/yes, 214-547/yes 548+/no.

At this point the reader may wonder why the particular periods of days were chosen. The answer is that the number of days were set empirically to divide the sample of Ss used in the various analyses as nearly equal as possible. In the actual analyses the groupings of Lodge members (exclusive of Rejects and

Refusers) appeared either as 1-61, 62-213 and 214+; or as 1-61, 62-213, 214-547 and 548+. In any particular analysis, no S appeared in more than one period.

4. Exit from the Program. In this category were included the specific variables: Total Exits, Total Exits per Month, Voluntary Exits, Involuntary Exits, Exits during the Month Following a Change Score Period, Exits during the Second Month Following a Change Score Period and Exits during the Third Month Following a Change Score Period. They were defined as a S score of "no" (not in the class) or "yes" (in the class). To illustrate, a S who was still in the Lodge would score "no" on all 7 of the classes of exits. However, a S who left the Lodge on his own volition to work in the community would score as follows: Total Exits/ yes, Total Exits per Month/yes, Voluntary Exits/yes and Involuntary Exits/no. Each of these classes of exits was treated as a separate variable.

5. Post-exit Functioning. This final category of criterion variables included indices of work, residence and hospital history between the date the S left the Lodge and December 31, 1970. These variables were defined by index scores for each S, computed in the manner described below.

Work history: number of days worked divided by number of days between date of exit and December 31, 1970. This quotient was the S's index score for "Post-Lodge Work History."

Residence history: situations were ranked as to degree of "normality" from 1 (poorest) to 8 (best). The situations were: (1) nursing home, (2) mental hospital-24 hour care, (3) mental hospital-family care, (4) mental hospital-halfway house, (5) parents, (6) boarding house, (7) own room or apartment and (8) own nuclear family. The rank of each residential situation was multiplied by the number of days the S had lived in that situation. The products were then summed across situations and the total was divided by the number of days from

date of exit to December 31, 1970. This quotient was the S's index score for "Post-Lodge Residence History."

Hospital history: the hospital modalities were ranked: (1) 24-hour care, (2) family care, (3) halfway house, (4) day care, (5) outpatient care and (6) out of hospital. The rank of each modality was multiplied by the number of days the S was assigned to that modality. The products were then summed across all modalities and the total was divided by the number of days from date of exit to December 31, 1970. The quotient was the S's index score for "Post-Lodge Hospital History."

Predictor Variables

Experience with the Lodge program and the results of the pilot study indicated that certain personal and situational variables might be related to certain of the criterion variables. The predictor variables used in this study relative to each of the five basic criteria may be found in Appendix I, B. The operational definitions of these variables may be found in the list of instruments in Appendix II, A.

Instruments

Where possible, established instruments were used to collect the data. New instruments were developed when necessary and appropriate reliability and validity tests were done. Appendix II provides a listing of the instruments used in this study, the variables they measure, the frequency of administration and an operational definition of the variable as measured by each instrument. Verbatim copies of the instruments are also provided.

Reliability

The Group Behavior Questionnaire (GBQ), (Jackson, 1967) and the Minnesota Importance Questionnaire (MIQ) (Gay and Weiss, 1967) are established instruments.

No additional reliability tests were felt to be necessary for the present research. The Achievement Motivation Rating Scale (AMRS), the Individual Report (IR), the Personal Abilities Rating Scale (PARS) and the Social Impact Scale (SIS) were tested for inter-rater reliability by using 5 individual raters. These persons rated all of the current members independently within a two week period. During the same period (at least 5 days but not to exceed two weeks after his first ratings) each rater completed another rating on each Lodge member. This last operation provided a test-retest reliability check on these instruments. With regard to the General Lodge Behavior Scale (GLBS), each of five Lodge members rated all other members. This procedure was completed during one day. A week later the same five members repeated their ratings on every other member. Table 1 presents the inter-rater and test-retest intercorrelations for instruments tested for reliability.

The Group Report (GR), the Individual Participation Patterns Schedule (IPPS) and the Lodge Activity Rating Scale (LARS) were tested for inter-rater reliability. Pairs of judges completed ratings on these instruments, observing the same behavior. The results were then compared for percentage of agreement. This was done on six different occasions. All percentages of agreement scores were above 70% and the mean across all of the observers and occasions was 83%.

Validity

The validity studies done by the authors of the MIQ (Gay and Weiss, 1967) were accepted as adequate. The Work Attitude Questionnaire (WAQ) was found to correlate significantly with and to load on the same factor as the MIQ. Therefore, it was considered to possess a satisfactory degree of concurrent validity in addition to its obvious face validity. Previous work on the GBQ (Jackson, 1967) was felt to be adequate for this instrument. The validation studies on

TABLE 1. MATRIX OF INTER-RATER AND TEST-RETEST RELIABILITY CORRELATIONS

Raters[a]	Instrument							
	AMRS[b]	GLBS	GR	IPPS	IR	LARS	PARS	SIS
	Correlation Coefficients or Percentages of Agreement							
1-2	.591[c]	.74	.90*[d]	.90*	.399	.90*	.105	.635
1-3	.500	.88	.75*	.70*	.494	.70*	.235	.231
1-4	.589	.71			.510		.641	.438
1-5	.602	.81			.514		.318	.393
2-3	.671	.78	.80*	.80*	.665		.496	.636
2-4	.357	.40			.459		.662	.662
2-5	.413	.64			.509		.580	.608
3-4	.395	.66			.554		.588	.663
3-5	.192	.86			.640		.673	.558
4-5	.593	.83			.660		.651	.526
1_1-1_2	.841				.843		.899	.945
2_1-2_2	.158				.709			.752
3_1-3_2	.671				.789		.918	.680
5_1-5_2	.747				.607		.775	.773
Mean I-R	.490	.73	.82*	.80*	.540	.70*	.499	.535
Mean T-R	.604				.741		.864	.787

[a]Raters included the Senior Research Assistant, Project Secretary, Student Assistants, Business Manager and Fort Logan Workshop Supervisors.
[b]See Appendix II for descriptions of instruments.
[c]Correlations below .441 (p .05) were considered to be statistically non-significant (Edwards, 1964, p. 362).
[d]An asterisk after a number indicates that the number represents a percentage of agreement not a correlation coefficient.

the SIS done as a part of the Mental Health and Manpower Project at Fort Logan were accepted as adequate (June, 1968). The PARS was found to correlate--and load a common factor--significantly with the SIS. This was accepted as concurrent validity for this instrument.

The objective nature of the observations taken on the LARS was considered to be evidence of face validity for this instrument. The questionnaires, interviews and observation schedules (Community Interview Schedule, IPPS, Lodge Affect Questionnaire, Lodge Attitude Interview Schedule, Lodge Communication Questionnaire, Post-Lodge Interview Schedule and Staff Questionnaire on the Lodge Program) were considered to possess a satisfactory degree of face validity.

To test the validity of the AMRS, ten Lodge members were administered the achievement orientation section of a multidimensional measure of achievement motivation developed and validated by rigorous factor analytic methods at the University of Denver and Loretta Heights College in Denver (Read and Spilka, 1969). The same ten members were rated on the AMRS. The scores on the two instruments were correlated to test for degree of concurrent validity between the two. The product-moment correlation coefficient was .374.

As for the GR, one of the researchers observed 8 Lodge meetings and scored each of them on the GR. Immediately after each meeting, the Business Manager was asked to assess on a 9 point scale the effectiveness-ineffectiveness of the meeting. The GR scores and the assessment scores were then correlated. The product-moment correlation coefficient was .10.

For the IR, 14 Fort Logan patients who work in the Fort Logan Workshop were rated on a Work Therapy Rating Scale (WTRS) by Workshop supervisors. The WTRS refers to behaviors, rated on a 5 point scale, in connection with "work habits" and "interpersonal relations." These behaviors are explicit and easy to observe. For this reason the WTRS was considered to possess a high degree of face

validity. The same supervisors rated the 14 patients on the IR. The total score of the IR was correlated with the WTRS total to test for concurrent validity. Their intercorrelations coefficient was .734.

No tests were done on the Business Manager's Monthly Assessment. Its results were accepted at their face value. Validity was assumed as the Business Manager had long acquaintance with both the processes in Fort Logan as well as in the Lodge. Also, his longstanding knowledge of the instrument and his daily dealings with the Lodge members were thought to contribute to the accuracy of his assessments of the attribute, Adjustment to Lodge Living and Working.

Data Collection

During the beginning stages of the project, the Senior Research Assistant administered all of the instruments, including interviews, questionnaires and rating scales. However, early in the data collection period, two Student Assistants were hired and trained, and subsequently did most of the data gathering under the supervision of the Senior Research Assistant.

The early pilot study of the Lodge (Hunt, 1968) indicated that the members had difficulty with questionnaires. To overcome this problem, the GBQ, LAQ, LCQ, MIQ and WAQ were administered as interview schedules until the men were able to complete them. Early in the study a simple survey was done to find out the members' preferences between questionnaires and interview schedules: 85% preferred interviews; 15% had no strong preference and none preferred questionnaires.

All interviews were completed at the Lodge or--in the case of members who were no longer in the Lodge--at the interviewee's residence. Reference to Appendix II will provide the reader with an outline of the frequency of administration.

Observations of the meetings were done by the use of the GR and IPPS. The Friday afternoon meeting was recorded on tape. The tapes were used primarily for training the Student Assistants in the use of the IPPS and the GR and to check the accuracy of the observations.

One interview, the Lodge Attitude Interview Schedule (LAIS)--completed on all Referrals who could be located--was also taped. The tapes were used to assist in the scoring of each S.

As for the rating scales, most of them (including the AMRS, IR, PARS and SIS) were completed within a few days during each bi-monthly collection period. As noted in the instructions at the beginning of each scale, the effort was to rate Lodge members as compared with the general United States population--not in comparison with each other.

One rating scale, the GLBS, was completed by the members themselves. It was administered as an interview with the investigator asking the member-rater the questions regarding the member being rated.

With regard to the GR, LARS and LCQ, strict timeliness was essential. The GR was completed immediately at the close of the meeting, the LARS within minutes of the time the investigator started his observations, and the LCQ as rapidly as was possible (generally within an hour).

One questionnaire, the GBQ, proved to be extremely difficult even when conducted as an interview. Despite this problem, data from this source were used because the GBQ was the only available tested instrument designed to measure group norms.

The reader may recall that the Mental Status Examination and the Admission Form (Demo variables) were not administered by the Lodge research staff. This applies to two other instruments; viz., the Business Manager's Monthly Assessment and the Staff Questionnaire on the Lodge Program. The BMMA, an adjustment

rating scale, was done at the end of each month by the Lodge Business Manager. The SQLP, a questionnaire for sampling attitudes of Fort Logan personnel toward the Lodge was administered by the Assistant Chief of the Vocational Services Department. A follow-up effort was made two weeks after the questionnaire was distributed to team personnel. Of the 224 distributed, completed questionnaires were received from 94 (42%) of the staff members.

In general, there was one potential problem that the investigators strove to avoid. They wanted the Lodge members not to become bored or irritated with the frequency of questionnaires and interviews and the disturbance of too frequent observations. Consequently, instruments having to do with variables considered to be relatively stable--for example, liking patterns, self-sufficiency-dependency and group norms--were administered less often.

In closing this section on data collection, it may be said that virtually no problems arose between the researchers and the Lodge members. When any question came up about any investigative procedure, the researchers explained fully what was being done and how it related to the research and to the Lodge. As for the Lodge members, they were most cooperative and helpful throughout the entire project, as was the Business Manager.

Data Analysis

The procedures used for analyzing the data collected for this research followed the general conceptual framework set forth above; that is, the criterion variables were studied in terms of the two classes of predictor variables, personal and situational. However, before these procedures were used some preliminary analyses were employed for the purpose of empirically simplifying and categorizing the rather formidable array of variables utilized in the early stages of the study.

The discussion in this data analysis section will deal (1) with the methods used in an early effort to obtain indices of relations among the variables and to provide a basis for eliminating attributes that appeared to be contributing little to the study; (2) with sequel analyses aimed at achieving further reduction in the variable array to make possible a more thorough study of the important influences; (3) with the methods used to study the relationships between the 5 general categories of criterion variables (referral, entering the Lodge, performance of members, exit and post-exit performance) and the 2 classes of predictors (personal and situational); and, (4) with community reaction to the Lodge.

To achieve the first objective listed above--to demonstrate relationships and commence reduction of variables--product moment correlation coefficients were computed between each variable and all other variables in the study, using data collected during the period of time between December 1, 1969 and March 31, 1970. The variable array was comprised of 101 psychiatric symptomatology and prognosis (Mental Status) items, 33 demographic and diagnostic characteristic and 82 Lodge observed (LODGE) variables, a total of 216. (Appendices II and III present all of the variables used in the process of gradually reducing the variable array. Appendix I C provides a list of the variables used in the final analyses.)

Mention of these correlations brings up a difficult problem that confronted the researchers throughout the study; namely, the small number of subjects (N) and the great number of variables. For example, the N for this first procedure was 19. To shore up the dependability of the correlations, rigorous limits for statistical significance estimates were used. For the first matrix the probability (p) for chance correlations was set at p less than .01, rather than the more conventional p less than .05. In the original set of variables many

proved to exhibit insufficient variability to be of value. These, of course, were eliminated. All variables that correlated with each other below the significance level were retained at this point. (These were all predictor variables at this stage.) If two variables intercorrelated with each other over plus or minus .80, the one was retained that had been tested for validity and reliability and, in addition, was easier to measure. When this process was completed, the entire research staff inspected the list of predictor variables to be eliminated. Those of particular interest--even though possibly redundant--were reinstated.

The second phase of the data analysis was done to reduce redundancy among the variables. The procedure was to generate correlation matrices among the variables that survived the culling process described above (phase 1). The variable array at that point (August, 1970) contained 80 mental status, 23 demographic and 55 LODGE variables, a total of 158. A matrix was generated for each of the 3 classes of variables; viz., mental status, demographic and LODGE. The matrices for demographic and mental status variables were derived from data in the Fort Logan Record System. The matrix for the LODGE variables was based on data collected during the month of May, 1970. These 3 matrices were then factored by principal components and rotated for orthogonal fit. From each of the clusters of variables produced by these factor analyses, only those variables that contributed most significantly to each factor were retained. In an additional effort to identify and to discount possible spurious correlations, a second matrix using the LODGE variables was generated with the data collected in June, 1970. Thus, a replication across months and subjects was done with this data. As a test of the soundness of generating matrices for classes of variables, an additional matrix was computed using all classes of variables. This matrix was also factored by principal components and orthogonal rotation, and then compared with the other matrices.

The net result of all of the procedures done in phase 2 was the retention of those variables that appeared to be the most significant ones in each cluster identified. A total of 82 (compared to the original 216) variables were retained. Thirty mental status, 22 demographic and 30 LODGE variables constituted this reduced array. (Appendix I C lists these predictors.) These procedures concluded the operation on the data for the purpose of reducing empirically the number of variables. Of course, this correlational and factoring work was also studied to identify relationships among variables, which were to receive more intensive analysis later.

The third discussion of analytical procedures has to do with the methods of analysis used to investigate relationships between the criterion variables and the two categories of predictor variables. In this section, the discussion will deal with each criterion variable, first, in reference to Personal, and then in reference to Situational, predictor variables. The first criterion variable that was considered was Referral to the Lodge.

Referral to the Lodge

Personal variables. All of the mental status and demographic variables retained in the reduced variable array were tested for their ability to distinguish between Lodge Referrals and a random sample of adult male Fort Logan patients.

Situational variables. The specific criterion measures in this category were referral ratio scores. These were derived by dividing the number of referrals made by each team by the number of patients on each team who were eligible to be referred. The response of staff members on the Staff Questionnaire on the Lodge Program (SQLP) were summed across the Fort Logan teams (Adult Psychiatric, Alcoholism and Crisis--a total of 10 teams). This

procedure yielded team scores on each item of the SQLP, on 3 subtotals (knowledge--behavior toward--and attitudes toward--the Lodge) and a total score across all items. Using the SQLP team scores together with the ratio scores for Referrals, correlation coefficients were computed. The purpose of generating this matrix was to ascertain the ability of the SQLP items, as indicators of staff knowledge about the Lodge and staff behavior and attitudes toward the Lodge, to predict Referrals. To test further the ability of team scores on the SQLP to predict Referrals, a stepwise multiple regression was completed, using the SQLP items, subtotals and total as predictors while employing Referrals as the criterion variable.

Each item, subtotal and the total on the SQLP was also tested for its ability to distinguish among the teams and among the professions represented on the teams (Mental Health Workers, Nurses, Psychiatric Technicians, Psychiatrists, Psychologists, Social Workers, Vocational Counselors and Activity Therapists). The statistics were analysis of variance (ANOVA), Chi square and the *t* test.

Entry

The specific criterion variables in this category were (1) those Referrals who were rejected by the Lodge and those who, on second thought, refused to join (together these *S*s are referred to as "Non-Members"), and (2) those Referrals who joined the Lodge (Members).

Personal variables. All Mental Status and Demographic attributes in the reduced variable array, as well as the Personal variables measured by the Lodge Attitude Interview Schedule (LAIS), the Post-Lodge Interview Schedule (PLIS), Work 2 Years Prior to Entering the Lodge (WORK-2), Residence History Since Age 18 (Residence) and Hospital History Since Age 19 (Hospitalization) were tested for their ability to distinguish between the two criterion groups. The statistics used were ANOVA, Chi square and *t* test.

Situational variables. Correlation coefficients were computed between Non-Member and Member ratio scores and the SQLP items, subtotals and total score. The purpose of this operation, as with Referrals, was to test whether staff knowledge about the Lodge and staff behavior and attitudes toward the Lodge, as measured by the SQLP, could be used to predict the number of a teams' referrals who would join--or not join--the Lodge. Moreover, multiple regressions were completed, using the SQLP team scores as predictors and Non-Members and Members as criterion variables.

Performance in the Lodge

The specific criterion variables employed were the following: Portion of Total Monthly Earned Income (INCOME), 1-61 days, 62-213 days and 214 days or more in the Lodge (TENURE). (INCOME in this instance refers to the Portion of Total Monthly Earned Income earned during both the S's first and last month in the Lodge.) For some of the tests in this section, the Non-Members were included to see which similarities or differences might exist between them and the tenure categories. They were classed as having zero tenure.

Personal variables. For each of the criterion variables used to study Performance, stepwise multiple regressions were completed. The predictor variables employed were divided into 4 classes: (1) Mental Status, (2) Demographic, (3) LODGE-ADJUSTMENT and (4) LODGE ATTITUDES-HISTORY. These classes of predictors were partitioned by use of the correlation matrices and factor analyses generated for reducing the variable array.

LODGE-ADJUSTMENT included the following specific variables: Achievement Motivation (AMRS), Self-sufficiency-Dependency (GLBS), Adjustment (IR), Leisure Time Social Activities (LARS), Social Impact (SIS), Participation in Meetings (IPPS), Liking for Others (LAQ-1), Liked by Others (LAQ-2), Talked to Others

(LCQ-1), Talked to by Others (LCQ-2), Percent of Meetings Attended (PMA), Personal Needs on the Job (MIQ) and Work Attitudes (WAQ).

LODGE ATTITUDES-HISTORY included the Lodge Attitude Interview Schedule (LAIS) and nine of the variables related to Ss' scores for "position on group norms;" viz., TIME, TOPIC,GOOD-BAD, ACTIONS VS DECISIONS, FEELINGS, PARTICIPATION, PROCESS, POINTING,and INTERRUPT SPEAKER. These norms were measured by the Group Behavior Questionnaire (GBQ). (See Appendix II A for an explanation of the abbreviations.)

Dividing the predictors into 4 classes was done in an effort to reduce the possible error produced by the small N and large number of variables. The stepwise regression procedure was chosen for the same reason. In this way, instead of regressing all 82 predictors on all 4 criterion variables, 14 or 15 predictors at a time were run on one criterion variable at a time. Furthermore, these regressions were completed by use of data from two groups of Lodge members. The first group included Ss for whom first month's scores were available. These were members who entered the Lodge on December 1, 1969 or later. (For anyone in the Lodge prior to this date, no data had been collected, thus data for his first month's tenure were not available.) This "first score" sample of members numbered 14.

The second group of members for whom regressions were completed were those for whom scores during their last month in the Lodge were available. This group also included members who were in the Lodge during December, 1970, and who had been there for 214 days or longer. The N for this "last score" sample was 24.

The purpose of the regression operations was to generate formulas of independent variables that would predict the criterion variables. For example, using the data from the "first scores" sample of members, perhaps:

1. A certain combination of Mental Status variables could predict a candidates first month's INCOME score.

2. The same might apply to Demographic variables.

3. A member's first month's LODGE-ADJUSTMENT scores might relate systematically to his first month's INCOME score.

4. A member's LODGE ATTITUDE-HISTORY scores might bear systematic relationships to his first month's INCOME score.

The same kinds of relationships were sought for predictions of a candidate's or member's TENURE; that is, whether he would remain in the Lodge 1-61, 62-213 or 214+ days. Thus, 4 separate multiple regressions were carried out on each criterion variable.

The same procedures were followed for the data from the "last scores" sample of members. Producing formulas that might predict first and last INCOME scores was interesting per se. In addition in the case of predictions of TENURE, another advantage might accrue: perhaps more confidence could be placed in a formula that replicated across the two sets of data.

In addition to the multiple regressions described above, all of the Mental Status and Demographic variables, as well as the LAIS, PLIS, WORK-2, RESIDENCE and HOSPITALIZATION were tested for their (individual) ability to distinguish among the TENURE groups (1-61, 62-213, 214-547 and 548+). The statistics used were ANOVA and Chi square.

Use of the LAIS and the PLIS was complicated by the fact that difficulties encountered in data collection prevented the administration of the instrument at uniform time periods for all Ss. A study was made to shed some light on the possible effect of time on the LAIS total score, PLIS total score and certain PLIS items of interest. The items had to do with how the S felt about (1) his progress since leaving the Lodge, (2) his current readiness for work,

(3) his current work situation and (4) his current residence situation. Each was tested for its ability to distinguish different chosen time periods. The time periods were defined as the number of days between the date of exit, rejection or refusal and the date the instrument was administered. These periods, in days, were: 0 (current members), 1-91, 92-182, 183-274 and 275+.

The analyses described above were cross-sectional tests relative to Performance while in the Lodge as to Portion of Total Monthly Earned Income (INCOME) and TENURE. Longitudinal studies were undertaken on these criterion variables also. The first of these employed change scores computed by comparing the S's scores at various times during his stay in the Lodge. The scores used were: Beginning, Mid, Post-mid, Final,and Extreme. To illustrate how these change scores were computed, for each variable, the Beginning scores were obtained by subtracting a S's first month's score from his score during his second month in the Lodge. The positive, or negative remainder became the Beginning change score. In like manner, the Final score was a S's last month's score less his next to last month's score. The Mid, Post-mid and Extreme change scores were somewhat more complex. For complete operational definitions pertaining to these variables, the reader is referred to Appendix II A. The personal predictor variables on which the various sets of change scores were computed were obtained from the following instruments: AMRS, BMMA, GLBS, IPPS, IR, LARS, LAQ-1, LAQ-2, LCQ-1, LCQ-2, MIQ, SIS and WAQ.

The purpose of these analyses was to identify the relationships among the predictor change scores and the criterion variables, INCOME and TENURE (1-61, 62-213 and 214+). To accomplish these objectives, a separate correlation matrix for each set of change scores was generated. The 5 matrices were comprised of product moment correlations between predictor and criterion variables.

The longitudinal study also included the construction and interpretation of time series graphs. The periodic scores on each variable were plotted for each S during his tenure in the Lodge. Appendix V, Figures 1, 2 and 3 provide illustrative graphs.

All of the predictor variables mentioned above in the discussion of Performance in the Lodge are personal variables. The next few paragraphs will point out the procedures used to study the situational predictor variables relative to Performance in the Lodge.

Situational variables. The periodic mean scores (monthly, bi-monthly or tri-monthly) across all current members on certain of the personal variables were considered to be measures of Lodge "milieu" or "group" scores. The monthly mean scores on the Group Report (GR) together with the milieu variables derived from the GLBS, IPPS, LARS, LAQ-2, LCQ-2, PMA and WAQ comprised the predictors included in this part of the study. The criterion of Performance was INCOME. To study the predictive ability of the variables, correlation coefficients were computed between the periodic scores of all the variables and Work, Problems and Crises. (Appendix II A-IPPS-for definitions of Work, Problems and Crises.)

The final study involving situational variables in relation to Performance in the Lodge referred to an investigation of the normative climate in the Lodge. For this purpose Jackson's (1967) Return Potential Model was employed. The specific types of norms studied were those that described acceptable and unacceptable behavior during regular Lodge meetings. The Group Behavior Questionnaire (GBQ) was used to collect the data. It was administered as an interview schedule in February and again in June, 1970. Each respondent was asked to indicate, on a scale ranging from positive 4 through zero to negative 4 (a 9 point scale), the extent to which he approved or disapproved of each of six levels along a particular behavior dimension. One item from the GBQ is provided in Figure 1 to illustrate how these procedures were carried out. In

this example the respondent, by circling 9, indicated his complete approval of staying on the topic under discussion more than 90% of the time (level a). He circled 8, a high degree of approval, for staying on the topic 80% of the time (level b) and so on down to complete disapproval, by circling 1 of alternative "f," which referred to staying on the topic 10% of the time.

FIGURE 1

A TYPICAL ITEM TAKEN FROM THE GBQ

---

2. His (an "average" member) remarks in the group are concerned directly with the topic under the discussion

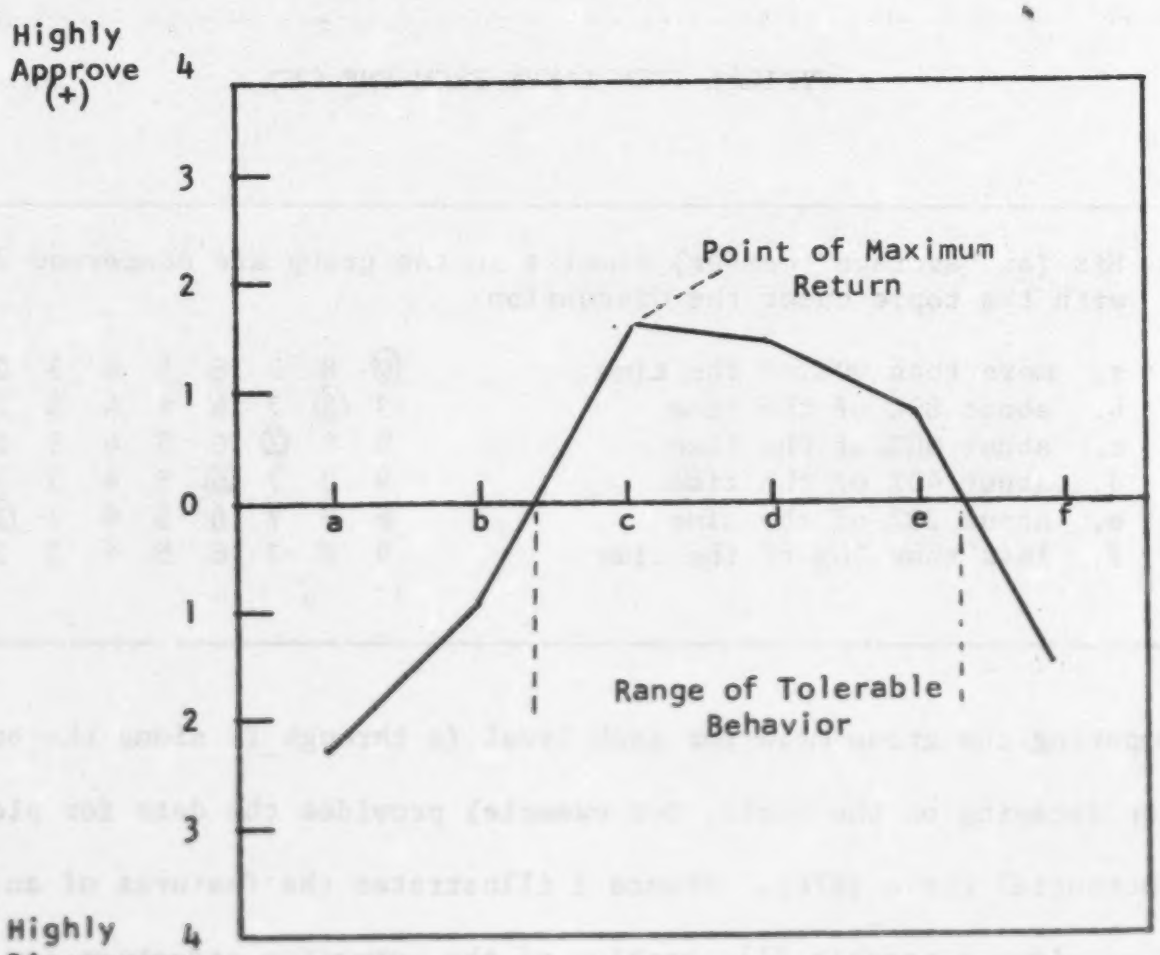
a.	more than 90% of the time	(9)	8	7	6	5	4	3	2	1
b.	about 80% of the time	9	(8)	7	6	5	4	3	2	1
c.	about 60% of the time	9	8	(7)	6	5	4	3	2	1
d.	about 40% of the time	9	8	7	(6)	5	4	3	2	1
e.	about 20% of the time	9	8	7	6	5	4	3	(2)	1
f.	less than 10% of the time	9	8	7	6	5	4	3	2	(1)

Computing the group mean for each level (a through f) along the behavior dimension (staying on the topic, for example) provides the data for plotting a return potential curve (RPC). Figure 2 illustrates the features of an RPC. The RPC provides a graphic illustration of the normative structure for a given behavior dimension. It allows one to identify the point of maximum return or that point along the behavior dimension that is most highly approved by the group members. Moreover, the Curve delineates the range of tolerable behavior, that is, the levels of the behavior that are not disapproved. Finally, one may judge from the RPC how positive or negative the norm may be. For an effective problem solving group, the typical result is disapproval of extreme levels. (Jackson explicates other derivable characteristics of the model, but

they are not applicable to this study.) By use of the GBQ, data were collected on 12 behavior dimensions (norms). RPCs were plotted for each norm. Complete descriptions of the norms appear under the GBQ in Appendix II A.

FIGURE 2

AN ILLUSTRATIVE RETURN POTENTIAL CURVE



During the period of this research, a study of group norms was completed at the University of Denver (Agar, 1970). The data were gathered on a group process seminar conducted by two skilled trainers from the University. There were 17 graduate students in the seminar, one of whom collected the data. The norms in this group were presumed to be optimally conducive to individual

growth, to providing a supportive group climate and to demonstrating awide range of acceptable or tolerable behavior on its norms. This effort was not connected with the present study. Fortunately, however, the results of that investigation were made available for use in the Lodge research. The RPCs resulting from the two studies were compared as to their points of maximum return, their range of tolerable behavior and their general positive or negative aspects.

To this point in the discussion of data analysis, the description has focused on 3 categories of criterion variables; viz., Referral, Entry and Performance in the Lodge. Next in line for consideration is Exit from the Lodge.

Exit from the Lodge

This group of criterion variables includes total exits, voluntary exits, involuntary exits, total exits per month and exits 1, 2 and 3 months after each change score period.

Personal variables. The predictor variables included the same 4 classes as were used in studying Performance. Furthermore, the same procedures were completed for Exits as were followed in studying Performance. In addition, analyses were completed that attempted to determine whether exit from the Lodge might reflect a change in an individual's behavior several months prior to the time the actual exit took place. In other words, the "delayed reaction" of changes in behavior was studied relative to exiting from the Lodge. In order to accomplish this,a point in time corresponding to 1, 2 and 3 months after the last date of the time period used in computing the change score was identified. It was then determined whether a given S had exited from the Lodge and whether he had done so volunterily or not (exit, voluntary exit, involuntary exit). Correlations were computed between each change score and the type of exit, if any, the individual had experienced 1, 2 and 3 months later. An example of the

kind of question that these procedures were meant to clarify is: Do beginning change scores predict exit from the Lodge during the 3rd, 4th and 5th month of Lodge tenure? If so, are such exits voluntary or involuntary?

An additional longitudinal study relative to exits was carried out using the time series graphs. Two judges, solely by examining each S's time series graphs on the predictor variables, established criteria for determining if--and approximately when--each S would exit. (The graphs were coded, so that the experimenters could not recognize who any of the S's were.) These predictions were then compared with which S's did exit involuntarily and the period during which the exit occurred. (See Appendix V for a more detailed explanation of this study and the rationale for using it.)

Situational variables. To study exits, correlation coefficients were computed between the predictor variables--using months (or periods)--and the Total Exits Per Month. As a way of checking the dependability of the resulting coefficients, Exits Per Month were tested for their ability to distinguish among the 13 months of the data collection period. Another purpose of the procedure was to determine whether additional information could be gained by comparing a graph of Exits Per Month to graphs of the group predictor scores.

The Return Potential Curves derived from the data on group norms also were studied with careful attention to any possible relationships to exits from the Lodge.

Post-Lodge Functioning

The specific criterion variables used to study Post-Lodge Functioning were indices of Work, Residence and Hospitalization.

Personal variables. The predictor variables--AMRS, GLBS, IR, SIS, IPPS, LAQ-1, LAQ-2, LCQ-1, LCQ-2, PNA, MIQ and WAQ--were tested for their ability to

predict Post-Lodge Functioning. For this purpose correlation coefficients were computed between the various types of change scores (Beginning, Mid, Post-mid, Final and Extreme) on predictor variables and the Post-Lodge Functioning outcomes.

Also each of the Post-Lodge Functioning indices of work, residence and hospitalization was tested for its ability to distinguish differences between pre-and post-Lodge scores. The statistic used was the t-test.

Furthermore, these post-Lodge outcomes were tested for their ability to distinguish the tenure group (Non-Members, 1-61, 62-213 and 214+). The statistic used was ANOVA. No attempts were made to analyze the data for relationships between situational variables on the one hand and Post-Lodge Functioning on the other.

The final procedure to be reported in this section has to do with describing "community reaction" to the Lodge. While recognizing that a thorough investigation of community attitudes toward the Lodge could only be accomplished through a separate study, it was thought that a sample of "community reaction" was of interest. To accomplish this purpose, the Community Interview Schedule was used. A sample of five immediate neighbors and nine current and former employers were contacted. Their responses to the questions on the CIS are reported in the section on "Results."

RESULTS

In the preceding sections of this report, the problem of chronicity, origins of the Lodge, research objectives and methods used--including subjects, variables, instruments, collection and analysis of data--were described. The results of analyses studying the relationships of personal and situational variables to each of the criterion categories (Referral, Entry, Performance, Exit and Post-Lodge Functioning) will be presented in this section. It may be helpful to note that the following material will be presented in the same order as was the description of procedures for analyzing the data. After a brief description of the results of procedures used to reduce the variable array, the material is organized according to each separate criterion category.

Reduction of the Number of Predictor Variables

Personal variables. The correlational and factor analytic procedures described earlier partitioned the original variable array into 3 classes: that is, Mental Status, Demographic and LODGE. They also suggested the partition of the LODGE variables into 2 subcategories: (1) LODGE-ADJUSTMENT including adjustment scales and social activity measures, and (2) LODGE ATTITUDES-HISTORY including the Lodge Attitude Interview Schedule (LAIS), hospital, residence and work history predictor variables as well as 9 of the personal scores on group norms.

These procedures also made possible an empirical reduction of the number of variables from an original array of 216 (Appendix I A, B, C and D) to a reduced array of 82 (Appendix II B) comprised of 30 Mental Status, 22 Demographic and 30 LODGE variables.

Situational variables. All of the items, subtotals and the total score from the Staff Questionnaire on the Lodge Program (SQLP) were retained. Also, the Group Report (GR) and the 12 norms generated by the data from the Group Behavior Questionnaire (GBQ) were kept for more intensive study.

Referral to the Lodge

Personal variables. The statistically significant differences found between Lodge referral (LR) and a random sample of the Fort Logan population (FL) are presented in Table 2. Twelve of the 30 Mental Status variables and 7 of the 12 Demographic variables distinguished the two groups.

Situational variables. The reader may recall that the purpose of this aspect of the research on the Lodge program was to determine which differences might exist among treatment teams and among the professions concerning staff attitudes, knowledge and behavior regarding the Lodge. The following three scores on the SQLP served to differentiate significantly the 10 treatment teams (1 x 10 analyses of variance): Item 9, "How do you feel toward the Lodge as a means of rehabilitation?" ($F=2.52$, $p=.025$); Item 11, "How would you compare the Lodge with other alternative rehabilitation resources?" ($F=3.54$, $p=.001$); and Attitude Subtotal ($F=5.90$, $p=.001$).

As for the 8 professions represented on the teams (Mental Health Workers, Nurses, Psychiatric Technicians, Psychiatrists, Psychologists, Social Workers, Vocational Counselors and Activity Therapists) three scores on the SQLP generated differences among them: Item 6, "With about how many of your patients hav you discussed the Lodge program during your tenure on the team?" ($F=3.50$, $p=.005$), the Behavior Subtotal ($F=2.79$, $p=.025$) and the Total score ($F=2.51$, $p=.025$).

TABLE 2

FINDINGS: FORT LOGAN RANDOM SAMPLE (FL) VS. LODGE REFERRALS (LR)

Variable[1]	Results[2] Stat.	Value	P	Mean Scores FL	LR	Interpretation[3]
Confusion	X2	6.30	.025	1.12	1.40	LR more confusion
General Information	t	2.06	.050	3.14	3.50	LR less general information
Recent Memory Disturbance	X2	6.99	.010	1.18	1.42	LR more recent memory disturbance
Confabulation	X2	4.94	.050	1.05	1.18	LR more confabulation
Slowing	X2	5.28	.025	1.26	1.45	LR more slowing
Vocabulary Size	X2	3.79	.001	2.92	3.40	LR smaller vocabulary
Inappropriate Behavior	X2	8.04	.001	1.11	1.38	LR more inappropriate behavior
Attitude Toward Recovery	t	2.14	.050	2.79	2.32	LR more pessimistic about recovery
Disturbance	X2	3.93	.050	2.18	2.25	LR less first disturbance
Isolation	X2	9.64	.001	1.25	1.73	LR more isolation
Prognosis	t	2.96	.005	2.83	2.38	LR poorer prognosis
Anticipated Degree of Improvement	t	3.49	.010	3.33	3.70	LR less improvement expected
Times Married	t	5.29	.001	1.26	.52	LR fewer times married
Social Class	t	2.05	.050	3.84	4.52	LR lower social class
Times Admitted	t	4.91	.001	1.35	2.24	LR more admissions
Family Income	t	4.31	.001	55.11	24.47	LR less income prior to hospital
# Jobs Last 2 Yrs.	t	2.29	.050	2.31	3.88	LR less stable work history
Marital Status	X2	30.82	.001	----	----	LR less in the category "married"
Diagnosis	X2	28.71	.001	----	----	LR more chronic brain syndrome and schizophrenia

[1] Those presented are the significant ones (of a total of 42).

[2] All tests are two-tailed.

[3] The Mental Status Examination and the Admissions Form were administered many months, and often many years, prior to a candidates referral to the Lodge.

When the professions were divided by level of education, the Behavior Subtotal differentiated the groups (F=2.27, p=.050). Dichotomizing the 8 professions by formal education into those with an M. A. or Ph. D. versus those below an M. A. produced only one significant discrimination, Item 4, "To what extent do you feel you are well enough acquainted with the Lodge program? (F=1.65, p=.050).

The correlation matrix between team scores on the SQLP and Referrals from the teams produced no statistically significant coefficients. However, the noteworthy coefficients (plus or minus .30 or greater) are: SQLP Item 1 (.37), Item 8 (.31), Item 12 (.34), Item 13 (-.30) and Item 14 (.36).

The multiple regression of the 17 SQLP items (teams scores) as independent variables predicting Referrals as the dependent variable produced no predictive formula.

Entry

Personal variables. The significant differences between Non-Members and Members produced from the tests of the Mental Status and Demo variables as well as the LAIS, PLIS, Work History 2 Years Prior to Joining (WORK-2), Residence History (RESIDENCE) and Hospital History (HOSPITALIZATION) are presented in Table 3. From the 30 Mental Status variables, 5 were able to distinguish the two groups; 4 of the 22 Demo variables, the LAIS, PLIS and RESIDENCE also were able to distinguish the two groups. On account of missing data for the small number of Non-Member subjects, the analyses for WORK-2 and HOSPITALIZATION were inderterminate.

Situational variables. As with Referrals, the correlation matrix between team scores on the SQLP and Non-Members and Members produced no statistically significant coefficients. However, the noteworthy ones (plus or minus .30 or greater) were the following.

TABLE 3

RESULTS OF TESTS TO DIFFERENTIATE NON-MEMBERS (NM) FROM MEMBERS (M)

Variable[1]	Results[2] Stat	Value	P	Mean Scores Non-Members	Members	Interpretation[3]
Confusion	X2	2.87	.100	1.13	1.50	M more confused
General information	t	2.06	.050	3.87	3.37	M more general information
Flight of ideas	X2	3.99	.050	1.13	1.22	M more flight of ideas
Depression	X2	4.82	.050	1.40	1.72	M more depression
Cooperation	t	1.81	.100	2.00	1.51	M more cooperative
Age	t	2.12	.050	30.61	38.40	M older
Social class	t	1.66	.100	3.83	4.40	M lower social class
# Jobs prior to admission	t	1.99	.050	1.83	4.60	M more unstable work history
Marital status	X2	2.81	.100	----	----	M less Sep., Div., Wid.
LAIS--total	f	35.14	.001	56.40	103.70	M more favorable
PLIS--total	f	15.73	.001	19.10	25.10	M more favorable
WORK-2[4]						
RESIDENCE HOSPITALIZATION[4]	f	6.71	.025	41.70	101.10	M more "normal"

[1]Those presented are the significant ones (of a total of 52).
[2]All tests are two tailed (some .100s are tabled--as "tendencies").
[3]The condition cited here have reference to the time when the Mental Status and Demographic data were collected--several months and in some cases years--before entry into the Lodge
[4] Indeterminate because of missing data on Non-Members.

For Non-Members, SQLP Item 6 (-.33), Item 7 (.37), Item 11 (.32) and Item 17 (.35). For Members, SQLP Item 1 (.31) and Item 12 (.30).

The multiple regressions using team scores on SQLP items as independent variables and Non-Members and Members as dependent variables produced no predictive formulas.

Performance in the Lodge

Personal variables. The first operations for these analyses were stepwise multiple regressions. They were carried out by use of data from two samples of

Lodge members: (1) those for whom were available first month's scores for the period they were in the Lodge (Sample 1) and (2) those for whom were available last month's scores (Sample 2). Four groups of independent variables were employed, labelled as Mental Status, Demographic, LODGE-ADJUSTMENT and LODGE ATTITUDE-HISTORY. Each of these 4 classes of predictors was regressed on each of the criterion variables, which were INCOME and TENURE in categories of days (1-61, 62-213 and 214+). The predictive formulas generated for each criterion variable are given in Tables 4 through 7.

A second set of operations was done involving Performance in the Lodge and Personal predictor variables in order to test for distinctions among the TENURE groups of the Lodge. Each of the following independent variables was tested for its ability to differentiate the TENURE categories: all 30 Mental Status, 22 Demographic, the LAIS, PLIS, WORK-2, RESIDENCE and HOSPITALIZATION. The predictor variables that differentiated significantly among the groups are presented in Table 8. From 30 Mental Status variables only Anger and Movement Toward People were able to differentiate on TENURE; from 22 Demographic variables, Age, Father Living and Mother Living produced significant differences. The LAIS, PLIS, WORK-2,RESIDENCE and HOSPITALIZATION yielded no significant differentiations.

The influence of the change in the Ss' performance (expressed as Beginning, Mid, Post-mid, Final and Extreme change scores) during their tenure as Lodge members was evaluated relative to INCOME and TENURE. The findings resulting from these analyses appear in Table 9.

TABLE 4

PORTION OF PAY: MULTIPLE REGRESSION ANALYSIS SUMMARY

Sample Number	Predictor Category and Specific Variable	Direction of r*	Multiple R^2**	Increase In R^2	F	df
1	Mental Status-Predicting 1st Month's INCOME:					
	Inappropriate Word Use	-	.219	.219		
	Auditory Hallucination	+	.376	.159	3.32	2,11
2	Mental Status-Predicting Last Month's INCOME:					
	Inappropriate Dress	+	.134	.134		
	Flight of Ideas	+	.276	.142		
	Attitude Toward Examiner	+	.461	.185		
	Hostility	+	.535	.152		
	Inappropriate Behavior	-	.687	.074		
	Movement Away From People	-	.749	.062	8.47	6,17
1	Demographic-Predicting 1st Month's INCOME:					
	Marital Status-Divorced	+	.424	.424		
	Family Income	+	.554	.130	6.83	2,11
2	Demographic-Predicting Last Month's INCOME:					
	No formula generated					
1	LODGE-ADJUSTMENT-First Month's Scores Predicting 1st Month's INCOME:					
	LCQ-2 Talked to by Others	+	.278	.278		
	LAQ-1 Liking for Others	+	.497	.219		
	IPPS-Meeting Participation	+	.608	.111		
	LARS-Social Time Activity	+	.704	.097	5.37	4,9
2	LODGE-ADJUSTMENT-Last Month's Scores Predicting Last Month's INCOME:					
	LCQ-2 Talked to by Others	+	.409	.409		
	LARS-Social Time Activity	+	.588	.179		
	LAQ-1 Liking for Others	+	.660	.072	12.94	3,20
1	LODGE ATTITUDE-HISTORY-Predicting 1st Month's INCOME:					
	GBQ-POINTING	-	.251	.251		
	Treatment for Alcoholism	+	.447	.196	4.45	2,11
2	LODGE ATTITUDE-HISTORY-Predicting Last Month's INCOME:					
	No formula generated					

*Correlation coefficients.
**Multiple correlation squared.

TABLE 5

TENURE: 1-61 DAYS: MULTIPLE REGRESSION ANALYSIS SUMMARY

Sample Number	Predictor Category and Specific Variable	Direction of r*	Multiple R^2**	Increase In R^2	F	df
1	Mental Status-Predicting 1-61 Days Tenure for a Candidate[1]: No formula generated					
2	Mental Status-Predicting 1-61 Days Tenure for a Candidate:					
	Cooperation	+	.167	.167		
	Prognosis	+	.280	.113		
	Anticipated Degree of Improvement	+	.361	.081		
	Danger to Others	+	.480	.119		
	Recent Memory Disturbance	-	.568	.087	4.72	5,18
1	Demographic-Predicting 1-61 Days Tenure for a Candidate: No formula generated					
2	Demographic-Predicting 1-61 Days Tenure for a Candidate:					
	Times Admitted	+	.232	.232		
	Chronic Brain Syndrome	+	.354	.122	5.76	2,21
1	LODGE-ADJUSTMENT-1st Month's Scores Predicting 1-61 Days Tenure for a Member:					
	MIQ	-	.298	.298		
	IPPS-Meeting Participation	+	.482	.184		
	LAQ-1 Liking for Others	-	.652	.170		
	Individual Report	-	.760	.108		
	Percent of Meetings Attended	-	.831	.071		
	AMRS	-	.926	.095	14.66	6,7
2	LODGE-ADJUSTMENT-Last Month's Scores Predicting 1-61 Days Tenure for a Member:					
	Social Impact Scale	+	.167	.167	4.43	1,22
1	LODGE ATTITUDE-HISTORY-1st Month's Scores Predicting 1-61 Days Tenure for a Member:					
	Treatment for Alcoholism	+	.300	.300		
	GBQ-TOPIC	+	.438	.138		
	GBQ-INTERRUPT	+	.565	.127		
	WORK-2	+	.683	.117	10.22	4,19

*Correlation coefficients.
**Multiple correlation squared.

[1]All Mental Status, Demographic and LODGE ATTITUDE-HISTORY formulas predict 1-61 tenure for a candidate or member.

TABLE 6

TENURE: 62-213 DAYS: MULTIPLE REGRESSION ANALYSIS SUMMARY

Sample Number	Predictor Category and Specific Variable	Direction of r*	Multiple R^2**	Increase In R^2	F	df
1	Mental Status-Predicting 62-213 Days Tenure for a Candidate: No formula generated					
2	Mental Status-Predicting 62-213 Days Tenure for a Candidate: Anticipated Degree of Improvement	-	.251	.251	7.37	1,22
1	Demographic-Predicting 62-213 Days Tenure for a Candidate: No formula generated					
2	Demographic-Predicting 62-213 Days Tenure for a Candidate: Age	-	.241	.241		
	Chronic Brain Syndrome	-	.336	.095	3.20	1,22
1	LODGE-ADJUSTMENT-1st Month's Scores Predicting 62-213 Days Tenure for a Member: MIQ	+	.419	.419		
	LARS	-	.645	.226		
	LAQ-1 Liking for Others	+	.813	.168	14.55	3,20
2	LODGE-ADJUSTMENT-Last Month's Scores Predicting 62-213 Days Tenure for a Member: GLBS	-	.254	.254		
	MIQ	+	.391	.137		
	LAQ-1 Liking for Others	+	.478	.087	6.12	3,20
1	LODGE ATTITUDE-HISTORY-1st Month's Scores Predicting 62-213 Days Tenure for a Member: GBQ-PROCESS	-	.175	.175		
	GBQ-TOPIC	-	.347	.172		
	GBQ-ACTIONS VS. DECISIONS	-	.425	.078	4.93	3,20
2	LODGE ATTITUDE-HISTORY-Last Month's Scores Predicting 62-213 Days Tenure for a Member: No formula generated					

*Correlation coefficients.
**Multiple correlation squared.

TABLE 7

TENURE: 214+ DAYS: MULTIPLE REGRESSION ANALYSIS SUMMARY

Sample Number	Predictor Category and Specific Variable	Direction of r*	Multiple R^2**	Increase In R^2	F	df
1	Mental Status-Predicting 214+ Days Tenure for a Candidate: No formula generated					
2	Mental Status-Predicting 214+ Davs Tenure for a Candidate: General information	-	.177	.177	4.75	1,22
1	Demographic-Predicting 214+ Days Tenure for a Candidate: No formula generated					
2	Demographic-Predicting 214+ Days Tenure for a Candidate: Mother living	-	.127	.127	3.20	1,22
1	LODGE ADJUSTMENT-1st Month's Scores Predicting 214+ Days Tenure for a Member:					
	LCQ-2 Talked to by Others	+	.583	.583	6.18	1,12
2	LODGE ADJUSTMENT-Last Month's Scores Predicting 214+ Days Tenure for a Member:					
	Individual Report	+	.174	.174		
	Social Impact Scale	-	.360	.186		
	LARS	-	.451	.091	5.47	3,20
1	LODGE ATTITUDE-HISTORY-1st Month's Scores Predicting 214+ Days Tenure for a Member:					
	GBQ-PROCESS	+	.270	.270		
	GBQ-POINTING	-	.358	.088	5.87	2,21
2	LODGE ATTITUDE-HISTORY-Last Month's Scores Predicting 214+ Days Tenure for a Member:					
	No formula generated					

*Correlation coefficients.
**Multiple correlation squared.

TABLE 8

RESULTS OF THE TESTS FOR DIFFERENCES AMONG THE TENURE GROUPS[1]

("Short Stayers" vs. "Long Stayers" (LS))

	Results[2]			Mean Scores				
Variable	Stat	Value	P	1-61	62-213	214-547	547+	Interpretation
Anger	F	2.94	.050	2.58	2.15	1.36	1.64	LS have less anger
Movement Toward	F	10.44	.001	1.92	2.15	2.18	2.82	LS have less movement toward
Age	F	4.09	.025	34.70	30.80	47.20	41.80	LS are older
Father Living	X2[3]	4.66	.050	1.67	1.77	1.33	1.27	LS less living Fathers
Mother Living	X2	7.23	.010	1.92	1.85	1.25	1.55	LS less living Mothers

[1]Those presented are the significant ones (of a total of 57).
[2]All tests were two-tailed.
[3]Chi square.

TABLE 9

MATRIX OF CORRELATION COEFFICIENTS[1]

BETWEEN PERSONAL PREDICTOR CHANGE SCORES, INCOME AND TENURE VARIABLES

	Change	Predictor Variable and Correlation Coefficient[2]									
Criterion Variable	Score Category	AMRS	BMMA	GLBS	IPPS	IR	LARS	LCQ 1	LAQ 2	LCQ 2	SIS	WAQ
INCOME	Beginning	597		-946					-800		-745	
	Post-Mid					660	810		490			
	Final	-422		597	-435	726	448	-403	-659	416	764	-578
	Extreme		600			540	510	560		760	510	
TENURE:												
1-61	Final	-417			-524			-634		631		
62-213	Beginning										-695	
	Final	-417										
214+	Beginning										695	
	Final				470					-451		

[1]Only significant coefficients are included. p .05 = .378 (Beginning and Final), p .05 = .458 (Mid, Post-Mid and Extreme). All figures multiplied by 1000 to eliminate decimals.
[2]Pearson's Product Moment Correlation Coefficients (r).

It will be recalled that further study of Performance in the Lodge was undertaken through the construction and analysis of time series graphs. Inspection of the time series graphs on Personal variables suggested the following.

1. Further stratification of LODGE variables into four classes of variables was possible. They were described as: Adjustment (AMRS, BMMA, GLBS, IR, PARS); Work Oriented (INCOME, MIQ, WAQ); Social Activity (IPPS, LARS, SIS); and Communication-Affect (LAQ-1, LAQ-2, LCQ-1, LCQ-2). (See Appendix V, Figure 1.)

2. The adjustment scales demonstrated positive ability to predict INCOME.

3. The social activity scales appeared to be negatively related to INCOME.

In connection with the use of the LAIS, the PLIS and certain item scores from the PLIS as predictor variables, an ancillary study was completed to test for differences in LAIS and PLIS scores as a function of time. Operationally, this took the form of testing the ability of LAIS total score, PLIS total score and PLIS items 28, 29, 30 and 31 to distinguish among selected time periods between date of exit from the Lodge and date the instrument was administered. The time periods in days were: current member (CM)-0, 1-91, 92-275 and 276+. Table 10 contains the results of this test. It may be observed that three of the 6 variables distinguished differences among the time period groups.

TABLE 10

FINDINGS ON DIFFERENTIATION OF TIME PERIODS ON LAIS AND PLIS

Variable	Results			Means Scores			
	Stat	Value	p	CM-0	1-91	92-175	276+
LAIS - Total Score	F			76.71	70.80	66.50	60.91
PLIS - Total Score	F			83.67	63.25	75.87	75.19
PLIS - Item 30 (How S felt about his current work situation.)	F			2.67	1.25	2.00	2.33

Situational variables. Table 11 shows the significant (p less than .05= .458) correlation coefficients between INCOME and BMMA (using BMMA as both predictor and criterion for this purpose) on the one hand and the monthly group predictor variables on the other.

TABLE 11

CORRELATIONS BETWEEN INCOME AND BMMA VS. THE GROUP PREDICTOR VARIABLES

Group Criterion Variable	Group Predictor Variables							
	BMMA	GLBS	IR	LAQ-2	LCQ-1	SIS	WAQ	CRISES
BMMA		.630	.741	.500		.781		-.479
INCOME	.508	.655	.492		.501	.766	.870	-.791

In Appendix IV, Figures 1 through 12 appear the Return Potential Curves (RPCs) resulting from plotting the data collected on normative structure in the Lodge. (See pages 38 to 40 for a description of the RPC.) Also provided are 3 typical RPCs plotted from data gathered for the group process seminar at Denver University (Appendix IV, Figures 13-15). The RPCs from the seminar exhibit: (1) points of maximum return between the "b" and "d" alternatives (80% to 60% of the time), (2) wide ranges of tolerable behavior--over 30%, and (3) either outright disapproval or close to the borderline on both extremes of behavior (that is, observing the norm either 90% or 10% of the time).

The Lodge outcomes were in striking contrast to those of the seminar in that they displayed (1) points of maximum return at one or the other extreme in 9 of the 12 plots; (2) no range of tolerable behavior in 10 of the 12 RPCs (that is, the curves did not return); and (3) either approval or disapproval of extreme alternatives instead of the more typical disapproval of both extremes. The reader may recall that the Group Behavior Questionnaire that was used to

generate the data from which the RPCs were plotted was administered in February and again in June, 1970. As may be seen in Appendix IV, Figures 1 through 12, the RPCs are very similar across the two occasions.

Thus far in reporting the results of operations on the data, the criterion variables of Referral, Entry into the Lodge and Performance in the Lodge have been discussed. The next few paragraphs will present the findings for the criterion variables related to Exits.

Exits from the Lodge

Seven specific variables were studied regarding exits: 1. total exits (EXIT), 2. total exits per month (EX/M), 3. voluntary exits (VEX), 4. involuntary exits (IEX), 5. exits during the month following a change score period (EX-1), 6. exits during the second month following a change score period (EX-2) and 7. exits during the third month after a change score period (EX-3).

All seven, of course, were exits that occurred during the data collection period. This report will follow the order established above in discussing, first, Personal--and then situational--predictor variables. Furthermore, these results will follow virtually the same series of analyses as did the report on Performance.

Personal variables. The predictive formulas related to VEX and IEX, and generated by the stepwise multiple regressions are presented below in Tables 12 and 13. As with "Performance in the Lodge," these regressions were carried out by use of data from two samples of Lodge members: (1) those for whom were available first month's scores for the period they were in the Lodge (Sample 1), and (2) those for whom were available last month's scores (Sample 2). Four groups of independent variables were employed labelled as Mental Status, Demographic, LODGE-ADJUSTMENT, and LODGE ATTITUDE-HISTORY. Each of these 4 classes of predictors was regressed on each of the criterion variables (VEX and IEX).

TABLE 12

VOLUNTARY EXITS: MULTIPLE REGRESSION ANALYSIS SUMMARY

Sample Number	Predictor Category and Specific Variable	Direction of r*	Multiple R^{2}**	Increase In R^{2}	F	df
1	Mental Status-Predicting Voluntary Exit of a Member:					
	General Information	+	.371	.371		
	Recent Memory Disturbance	+	.678	.307		
	Movement Away From People	+	.864	.186		
	Vocabulary Size	-	.896	.032		
	Cooperation	+	.923	.027		
	Attitude Toward Examiner	+	.958	.035	26.83	6,7
2	Mental Status-Predicting Voluntary Exit of a Member:					
	Recent Memory Disturbance	+	.177	.177		
	General Information	+	.352	.175		
	Sexuality Conflict	-	.476	.124	4.81	5,18
1	Demographic-Predicting Voluntary Exit of a Member:					
	Marital Status-Separated	+	.461	.461		
	Times Admitted-Fort Logan	+	.760	.299	17.40	2,11
2	Demographic-Predicting Voluntary Exit of a Member:					
	Mother Living	+	.143	.143	3.67	1,22
1	LODGE-ADJUSTMENT-1st Month's Scores Predicting Voluntary Exit of a Member:					
	LCQ-2 Talked to by Others	-	.231	.231		
	LAQ-1 Liking for Others	-	.486	.255	5.37	4,9
2	LODGE-ADJUSTMENT-Last Month's Scores Predicting Voluntary Exit of a Member:					
	LARS	+	.150	.150		
	Individual Report	-	.303	.153	4.58	2,21
1	LODGE ATTITUDE-HISTORY-1st Month's Scores Predicting Voluntary Exit of a Member:					
	WORK-2	+	.440	.440		
	GBQ-TOPIC	+	.693	.253		
	GBQ-ACTIONS VS. DECISIONS	-	.825	.132		
	WORK-Since age 18	-	.884	.059		
	LAIS	-	.921	.037	18.43	5,8
2	LODGE ATTITUDE-HISTORY-Last Month's Scores Predicting Voluntary Exit of a Member:					
	WORK-2	+	.105	.105	2.59	1,22

*Correlation coefficients.
**Multiple correlation squared.

TABLE 13

INVOLUNTARY EXITS: MULTIPLE REGRESSION ANALYSIS SUMMARY

Sample Number	Predictor Category and Specific Variable	Direction of r*	Multiple R^2**	Increase In R^2	F	df
1	Mental Status-Predicting Involuntary Exit of a Member:					
	Blocking	+	.269	.269		
	Inappropriate Word Use	-	.426	.157		
	Recent Memory Disturbance	-	.576	.150		
	General Information	-	.722	.146		
	Hostility	-	.835	.113	20.63	6,7
2	Mental Status-Predicting Involuntary Exit of a Member:					
	Prognosis	+	.171	.171		
	Confabulation	+	.299	.128		
	Sexuality Conflict	-	.382	.083		
	Movement Toward People	-	.481	.099		
	Cooperation	-	.572	.091	4.81	5,18
1	Demographic-Predicting Involuntary Exit of a Member:					
	Father Living	+	.400	.400		
	Veterans Status	-	.569	.169		
	Social Class	+	.672	.103		
	# Jobs-2 Yrs. Prior to FL	+	.797	.125		
	Times Admitted-Fort Logan	+	.911	.114		
	Family Income	-	.948	.037	20.90	6,7
2	Demographic-Predicting Involuntary Exit of a Member:					
	No formula generated					
1	LODGE-ADJUSTMENT-1st Month's Scores Predicting Involuntary Exit of a Member:					
	No formula generated					
2	LODGE-ADJUSTMENT-Last Month's Scores Predicting Involuntary Exit of a Member:					
	LARS	-	.387	.387	13.90	1,22
1	LODGE ATTITUDE-HISTORY-1st Month's Scores Predicting Involuntary Exit of a Member:					
	HOSPITALIZATION-Fort Logan	+	.440	.440		
	GBQ-ACTIONS VS. DECISIONS	-	.693	.253		
	WORK-2	-	.825	.132	15.58	3,10
2	LODGE ATTITUDE-HISTORY-Last Month's Scores Predicting Involuntary Exit of a Member:					
	GBQ-PARTICIPATION	-	.224	.224	6.34	1,22

*Correlation coefficients.
**Multiple correlation squared.

The LAIS-Total Score, PLIS-Total Score, WORK-2, RESIDENCE and HOSPITALIZATION were tested to distinguish between VEX and IEX. The only one of these 5 to produce differences was RESIDENCE. The procedure was a 1 x 3 ANOVA (including Non-Members as a third study group) resulting in an F of 3.77 (p less than .05). VEX had a mean score of 122.3 compared to 97.1 for IEX.

As for the studies using change scores, the matrix of significant correlations are shown in Table 14.

An investigation of the use of the time series graphs to predict IEX was completed. The outcome of this test was that the judges predicted correctly who would--and who would not--exit involuntarily from the Lodge in eleven out of twelve predictions. (See Appendix V for a more detailed discussion.)

Situational variables. It may be recalled that the criterion variable, Total Exits per Month (EX/M), was tested for its ability to distinguish differences among the 13 months of the data collection period. The results were that a Chi square test across the 13 months found no differences among the months; that is, EX/M produced a random distribution.

As a check against this procedure, correlation coefficients were computed between EX/M and the GR, Work Problems, General Problems, Crises and the "Milieu" variables (BMMA, GLBS, IPPS, IR, LARS, LAQ-2, LCQ-2, PMA and WAQ). The only significant correlation coefficients were the following: GLBS (.693) and IPPS (-.511). The coefficients between EX/M and Work Problems, General Problems and Crises were all below .30. Considering these results, no comparisions were made between a graph of EX/M and the monthly scores for group and milieu variables.

Post-Lodge Functioning

The specific variables in this category of criterion outcomes were WORK, RESIDENCE AND HOSPITALIZATION after exit from the Lodge.

TABLE 14

MATRIX OF CORRELATION COEFFICIENTS

BETWEEN PERSONAL PREDICTOR CHANGE SCORES AND CRITERION VARIABLES

Criterion Variable	Change Score Category	Predictor Variable and Correlation Coefficient[1] BMMA[2]	GLBS	IR	LARS	LAQ-1	LCQ-1	LAQ-2	SIS	WAQ
EXIT	Beginning	-447[3]						408		
	Mid			-300	320	490	-510		-390	
	Post-Mid	-430	-720	-550	-510		-420			-370
	Final	-353	-552	-669	-518			-494	366	
	Extreme	-510	-680	-300				-400		-300
VEX	Beginning		-567				-323	431	-413	488
	Mid									610
	Post-Mid			-350	-400				-460	
	Final						334	671	-499	
	Extreme									
IEX	Beginning	-499	400			332		-324	-475	-347
	Mid			-550	320	490	-510			
	Post-Mid	-510	-810	-380	-310		-570			
	Final	-509	-552		-551	-518		-494	366	
	Extreme	-510	-680	-300				-400	-350	-300
EX-1[4]	Beginning	-447						408		
	Post-Mid	-430	-720	-550	-510		-420			-370
	Final	-353	-552		-669	-518		-494	366	
	Extreme	-510	-680	-300				-400		-300
EX-3	Mid			-300	320	490	-510		-390	

[1]Pearson's Product Moment Correlation Coefficients (r).
[2]The AMRS, IPPS and LCQ-2 yielded no significant correlations; consequently, they are omitted from the table.
[3]Only coefficients of $\pm$ .30 or greater are included. p .05=.378 (Beginning and Final), .458 (Mid, Post-Mid and Extreme). All figures multiplied by 1000 to eliminate decimals.
[4]EX-1 produced no significant rs for Mid scores; EX-2 turned out to have no significant rs on any change score; and EX-3 had significant rs on only one change score: Mid.

Personal variables. It may be recalled that WORK, RESIDENCE AND HOSPITALIZATION experience after leaving the Lodge were tested for their ability to distinguish among the Non-Members and three of the Tenure groups: 1-61, 62-213 and 214+. Also, these variables were tested for their ability to differentiate pre-Lodge experience from post-Lodge experience. The outcomes of these tests appear in Tables 15, 16 and 17. None of the three variables produced significant differences among the four groups either for pre- or post-Lodge scores.

TABLE 15

PRE-LODGE WORK, RESIDENCE AND HOSPITALIZATION MEAN SCORES

FOR FOUR LODGE REFERRAL GROUPS

	INDEX		
Group	Work	Residence	Hospitalization
Non-Members	16.33	18.33	56.66
1-61	29.30	27.20	60.10
62-213	35.30	26.30	45.30
214+	12.50	21.05	64.65

TABLE 16

POST-LODGE WORK, RESIDENCE AND HOSPITALIZATION MEAN SCORES

FOR FOUR LODGE REFERRAL GROUPS

	INDEX		
Group	Work	Residence	Hospitalization
Non-Members	7.05	43.00	35.79
1-61	16.33	47.25	31.33
62-213	21.83	51.67	31.17
214+	10.42	28.83	47.58

TABLE 17

POST-LODGE FUNCTIONING t-TESTS BETWEEN PRE- AND POST-LODGE SCORES ON WORK, RESIDENCE AND HOSPITALIZATION OF NON-MEMBERS AND MEMBERS

Variable	Non-Member		Members					
			1-61		62-213		214+	
	t-test	p	t	p	t	p	t	p
Work	1.03	ns[1]	1.03	ns	0.81	ns	0.29	ns
Residence	4.02	.001	2.54	.010	3.15	.005	1.41	ns
Hospital	2.20	.025	2.40	.010	1.81	.050	0.91	ns

[1]Not statistically significant.

However, t-tests performed on each group (Non-Members, 1-61, 62-213 and 214+) between its pre-post-Lodge scores did produce significant differences for RESIDENCE and HOSPITALIZATION. It is interesting to note that all groups gained lower scores from pre- to post-Lodge work and hospital experience with or without the Lodge. However, this deterioration in the area of work was not at such a level as to be statistically significant. In fact, for Members who were in the Lodge 214 days or more it was extremely small.

Three of the four groups showed a significantly higher Residence Index from pre- to post-Lodge with Non-Members having the greatest negative change. Although there was some negative change noted for 214+ Members, it was small and not statistically significant.

Regarding the Hospitalization Index, all four groups showed negative change. The greatest change toward low intensity or more hospitalization was seen for Non-Members with the 62-213 Members changing the least.

Correlation coefficients were generated--using first, mid and last scores--between the criterion variables and 13 predictor variables (including INCOME as a predictor for the purposes of this analysis). The results of these procedures are given in Table 18. Only statistically significant coefficients are shown (p less than .05).

TABLE 18

SIGNIFICANT CORRELATIONS BETWEEN POST-LODGE OUTCOMES

AND THE PERSONAL PREDICTORS

Criterion Variable	Predictors											
	AMRS	BMMA	GLBS	IPPS	IR	LARS	LAQ-1	LAQ-2	LCQ-1	LCQ-2	SIS	WAQ	INCOME
First Scores													
Work													
Residence							-.625		-.697				
Hospital							.462						
Mid Scores													
Work						-.711							
Residence						-.581			-.526				
Hospital	-.790												
Last Scores													
Work										.677			
Residence	-.790												
Hospital						-.600							.603

Correlations were also generated to ascertain the relationships between the change scores (beginning and final) for the personal predictors (AMRS, BMMA, GLBS, IPPS, IR, LARS, LAQ-1, LAQ-2, LCQ-1, LCQ-2, SIS, WAQ and INCOME) and the post-Lodge outcomes of WORK, RESIDENCE and HOSPITALIZATION. (See Appendix II A for operational definitions of the change scores.) The significant correlations (p less than .05) are shown in Table 19.

Community Reaction to the Lodge

The responses to the Community Interview Schedule are summarized in Table 20. It will be recalled that this data was collected from a sample of 5 neighbors, and 9 individuals who had employed the Lodge members. The purpose was to describe in approximate terms, the "community reaction" to the members.

TABLE 19

SIGNIFICANT CORRELATIONS BETWEEN POST-LODGE OUTCOMES AND CHANGE SCORES FOR THE PERSONAL PREDICTORS

Criterion Variable	Predictors								
	AMRS	BMMA	IPPS	IR	LAQ-2	LCQ-2	SIS	WAQ	INCOME
Beginning Change Scores									
Work		-.745							
Residence	-.645		.611			.506		-.670	
Hospital					-.571		.704	.551	
Final Change Scores									
Work			-.604			.813			
Residence	-.836		-.590	.574		.689			
Hospital				-.662					

TABLE 20

RESPONSES TO THE COMMUNITY INTERVIEW SCHEDULE

Community Interview Schedule Items	Number of Responses				
Neighbors (N=5)	1	2	3	4	5
Are you acquainted with any of the Labor Saver Service men? 1. No 2. Yes	4	1			
What do you think of them as neighbors? 1. Unfavorable 2. Neutral 3. Favorable	1	2	2		
Is there anything else you would like to say regarding the men who operate the Labor Saver Service? 1. Poor 2. Fair 3. Good 4. Excellent 5. No response	1	2			2
Employers (N=9)					
When one or more of the men from Labor Saver Service worked for you did you find the work to be: 1. Poor 2. Fair 3. Good 4. Excellent	1		4	4	
Did you consider the general behavior of the men to be: 1. Poor 2. Fair 3. Good 4. Excellent			5	4	
Did you feel that the price you paid for the work was fair and competitive? 1. No 2. Yes		9			
Do you plan to hire Labor Saver Service again for similar kinds of work? 1. No 2. Yes	1	8			
Is there anything else you would like to say regarding the men who operate the Labor Saver Service? 1. Poor 2. Fair 3. Good 4. Excellent 5. No response	1			4	4

CONCLUSIONS

This section will be presented in two parts. In the first part will appear interpretations of the relationships found between the criterion and predictor variables. The second part will discuss implications of the findings for the Lodge program.

Interpretations

Referral

Personal variables. The most obvious conclusion from examining the results of contrasting Lodge referrals with the sample of Fort Logan's general adult male population (Table 2) is that the selection criteria for referral were being followed. That is, patients who were among the longest stayers and the most disturbed patients were being proposed as candidates for Lodge membership. It should be noted, however, that many of the referrals may not be as impaired as one might think. Although referrals typically are rated low on "attitude toward recovery," "prognosis," and "anticipated degree of improvement," those who choose to give the Lodge a try may have positive motivation that was not identified by the Mental Status Examination. It may be recalled that referral to the Lodge was on a voluntary basis.

The results from demographic variables are interesting. They support the Mental Status findings and also indicate that Lodge referrals are less capable, less successful vocationally prior to the hospital and have no spouses to live with if they leave the hospital. The latter finding related to the hypothesis that Lodge referrals are typically without resources in the community (for many the Lodge is their only resource). The findings regarding "social class" and "family income prior to hospitalization" would lend support to that hypothesis,

because poor people typically are low on community resources. In addition to indicating low resources, it may be proposed that these conditions are highly correlated with severe and chronic mental illness and are in that case by-products of Lodge candidates being chosen partly on the basis of their chronicity. It is also possible that hospital personnel are making judgments about who will and who will not do well in the Lodge, based on assumptions about social class and degree of affluence, although the selection criteria do not include these considerations.

Situational variables. The results from the Staff Questionnaire on the Lodge Program (SQLP) indicate that the teams at Fort Logan vary considerably in their attitudes toward the Lodge. The SQLP items that generated differences among teams all had to do with attitudes about and assessment of the Lodge as a means of rehabilitation. As regards knowledge about and behavior toward the Lodge, the teams were quite similar. Inasmuch as variation in attitudes fails to produce variation in behavior toward the Lodge, perhaps, a circumstance was at work that prevented teams with very favorable attitudes from referring more patients. Such an influence could have been a lack of eligible patients on certain teams or a perception on the part of team staff that they needed to keep referral numbers very low to increase chances of their patients being accepted. (At this writing, April, 1971, there has been only one referral to the Lodge since November, 1970.) One may ask whether all the teams had unfavorable--although varying--attitudes toward the Lodge. However, examination of mean scores across teams shows only one team with "unfavorable" current (August, 1970) attitudes, 2 with "favorable," and the remaining 7 having generally "indifferent" attitudes.

Turning from teams to the professions making up the team personnel, 3 SQLP items generated differences among the 8 professions (Mental Health Workers, Nurses,

Psychiatric Technicians, Psychiatrists, Psychologists, Social Workers, Vocational Counselors and Activity Therapists). All three had to do with "Behavior toward the Lodge." These findings indicate that while negative or positive attitudes and knowledge do not distinguish the various kinds of Fort Logan treatment team staff, how they behave in relation to the Lodge does. The single most obvious influence on the obtained F value seen by reviewing mean scores is that the Vocational Counselor is more likely to be concerned about, and thus his behavior with patients positively influenced by, the Lodge. For further comparison the 8 groups of professions were divided into 4 groups by amount of formal education (Mental Health Workers and Psychiatric Technicians, Nurses and Activity Therapists, Social Workers and Vocational Counselors, Psychiatrists and Psychologists). Grouping the professions into these four groups provided one significant differentiation--again on Behavior. All groups were very similar except the Vocational Counselor-Social Worker combination, which was behaviorially more involved with the Lodge. Finally, dichotomizing all staff into two groups on the basis of formal education--Bachelor's Degrees and below versus Master's Degrees and above--produced one significant discrimination on Item 4, "To what extent do you feel you are well enough acquainted with the Lodge program?" The staff members with more formal education felt that they were, to their satisfaction, more informed about the Lodge. It may be noted that the group of the 8 professions that felt most comfortable with their level of knowledge was that composed of Vocational Counselors. Finally, the importance of a lack of significant differentiating variables should be mentioned. The data suggest that except for Vocational Counselors, variations in knowledge, behavior and attitudes regarding the Lodge program were largely personal and not governed by professional background or present role on the team.

Entry

Personal variables. The men involved in this part of the study were all Lodge referrals, divided into the two groups, Non-Members and Members. "Non-Members" refers to referrals who were rejected by the current Lodge members as well as those who, upon reconsideration, refused to join. There was some indication in the data that for some variables those who were rejected were quite dissimilar to those who refused. For example, the "Refusers" had more desirable scores on Vocabulary Size, Depression, Conflict in Sexuality, Attitude toward the Examiner, Isolation and Anticipated Degree of Improvement. However, a very small N prevented statistical contrasts of these two sub-groups of the Non-Members.

Regarding Non-Members versus Members, the ones who became members had a history of more severe disturbance than the Non-Members. In addition, when the Mental Status Examination was administered, they were characterized as being more cooperative. Perhaps, this quality persisting over time, was an important factor in their choosing to join--as well as their being accepted by--the Lodge. Members exhibit a more unstable work history. This may indicate a low probability that they could be independently successful on a job upon discharge from the hospital. Members tend to be older and from a lower social class than Non-Members. Both of these characteristics may perpetuate themselves; that is, the existing Lodge members would tend to choose people as new members that looked like the existing group on these observable characteristics of age and social class, and perhaps even on the basis of certain psychiatric problems. It would seem that those who become members are drawn from the hospital's more disturbed patients, are fairly severely incapacitated, and have little or no family or other social resources in the community. However, to draw the picture accurately, the data do not imply that Lodge members

are the most severe cases from the hospital. It is probable that the most incapacitated patients remain in the hospital, unsuited even for the protective environment of the Lodge.

As would be expected, Members expressed more favorable attitudes toward the Lodge than did Non-Members. This finding persisted over time, often over many months, as shown by the results on both the Lodge Attitude Interview Schedule (LAIS) and the Post-Lodge Interview Schedule (PLIS). The reader may recall however, that Members' attitudes toward the Lodge--as expressed in the LAIS and the PLIS--suffered some attrition over time (Table 10). Also, Members in their own accounting of residence history experienced a more "normal" residential situation during their adult years. If one assumes that a more "normal" situation implies that they faced a greater necessity to adjust to close relationships with others, this result suggests more ability to adjust socially on the part of Members compared with Non-Members. Thus, there may be a tendency on the part of these patients to choose the Lodge. Perhaps, also implied, is a recognition by the current Lodge members of this ability; hence, acceptance of this type of candidate into the Lodge.

Situational variables. The correlations between Non-Members and Members on the SQLP items were not statistically significant. Nevertheless, there were some noteworthy relationships suggested. These may be found on page 47. The team's estimate of the number of its patients who were eligible to enter the Lodge related positively to the number of their referrals who became Members (SQLP Item 1). Another positive, but low correlation appeared between Item 12 (the naming of ways in which the team judged the Lodge to be beneficial to its patients) and the number of referrals who became Members. Correlated positively with the team's number of Non-Members were the following items: 7 (the naming of guidelines for referring patients), 11 (the team's estimate of the Lodge

compared to other facilities) and 17 (the total score on the SQLP). Item 6 (number of patients with whom the team discussed the Lodge) correlated negatively with Non-Members; the more patients with whom the program was discussed, the fewer the Non-Members. A very guarded implication in this last relationship may be that the more patients with whom a team disucssed the Lodge, the more adept it became at recognizing who would be able to gain entrance into the Lodge.

Performance in the Lodge

Personal variables. Table 4 presented in detail the findings from multiple regression analyses for the portion of pay criterion. These results may be condensed into the following simplified presentation. All variables as described would predict higher INCOME.

1. Mental Status variables predicting a candidate's INCOME during his first month in the Lodge:

   a. Less inappropriate word use.
   b. More auditory hallucination.

2. Mental Status variables predicting a candidate's last month's INCOME scores:

   a. More inappropriateness of dress.
   b. More flight of ideas.
   c. More negative attitude toward examiner.
   d. More hostility.
   e. Less inappropriate behavior.
   f. Less movement away from people.

3. Demographic data predicting a candidate's first month's INCOME scores:

   a. Higher incidence of divorce.
   b. Higher family income.

4. Lodge Adjustment variables--a member's first month's scores relating to his first month's INCOME:

   a. More talked to by others.
   b. More liking of others.
   c. More verbal events in meetings.
   d. More leisure time social activity.

5. Lodge Adjustment variables--a member's last month's scores relating to his last month's INCOME:

a. More talked to by others.
b. More leisure time social activity
c. More liking for others.

6. Lodge Attitude-History variables--relating to a member's first month's INCOME:

a. More likely to adopt the norm: Pointing Out and Evaluating the Behavior of Others.
b. More treatment for alcoholism.

Regarding the psychiatric symptomatology data from the Mental Status Examination, it may be seen that the last INCOME criterion score is predicted by active aggressive (to the point of being hostile) behavior. A positive attitude toward the mental status examiner, less movement away from people, less inappropriate behavior, flight of ideas, inappropriate dress and hostility all indicate a high income score. This suggest that patients who, during their stay at Fort Logan, show some aggressiveness and assertiveness, after a while in the Lodge tend to be among the best members. Apparently members of this type are not at first able to do well as regards income; possibly due to their assertiveness they meet with some initial resistance in their first few weeks in the Lodge.

Demographic data indicate that high family income prior to the Lodge experience and that being divorced (in the Lodge this means as opposed to single, not as opposed to married) both predict high portion of pay. This indicates that "success" or culturally syntonic experiences (i.e., high earnings and marrying) prior to the Lodge suggest earning success in the Lodge.

Regarding the Lodge adjustment variables, three predict high Lodge income both early and late in the Lodge stay: (1) talked to by other members, (2) liking for other members, and (3) leisure time social activity (LARS). This is to say that the man who is very often talked to by other Lodge men, who reports

liking most or all of those men, and who has a high LARS score (reflecting high quantity and quality of social interaction while in the Lodge) will have high income. For the first set of scores it was noted that a high number of verbal events during the regular Lodge meetings was also related to high income--this is clearly supportive of the three noted above. Lodge attitude-history scores suggest that members who do not think it appropriate to point to particular members and evaluate their behavior, and that members who have been (or are) alcoholics, have higher initial Lodge income. The first of these two seems to support the notion reported earlier that assertiveness during the first month of the Lodge stay contraindicates high INCOME. The fact that initial income was related to a history of alcoholism may reflect the greater functional capacity of these patients.

Reference to Table 9 indicates that a generally positive change in scores on general adjustment (IR), social activity in the Lodge (LARS), communications with others (LCQ-2) and social impact (SIS) all relate to greater income. Thus, it seems reasonable to conclude that the members who earn more are also the ones who are most likely to be socially active and accepted by other members. It is of interest to note that there is a negative relationship between INCOME and the final change scores on work attitudes (WAQ), participation in meetings (IPPS), motivation to achieve (AMRS) and communication with others (LCQ-1). This would seem to indicate that the deterioration of the individual's behavior in these areas in the final month or so before leaving the program did not significantly affect his overall earnings relative to other members. However, in light of the earlier positive relationship between these change scores and INCOME, one might expect that continued deterioration would be reflected in lower earnings. It is also noteworthy that changes in the Business Manager's Monthly Assessment (BMMA) are not related to INCOME except in the extreme.

Tables 5 through 7 presented the multiple regression analyses for the criterion variable, TENURE. This criterion was divided into three parts--1-61 days, 62-213 days and 214+ days in the Lodge. The following is a simplified presentation of the results of those three segments.

A. TENURE: 1-61 Days

1. Mental Status variables predicting the likelihood of a candidate's falling into the 1-61 days TENURE category (Sample 2):

a. More cooperative.
b. Higher prognosis.
c. Greater anticipated degree of improvement.
d. More danger to others.
e. Less recent memory disturbance.

2. Demographic variables predicting a candidate's probability of 1-61 Days TENURE (Sample 2):

a. More times admitted.
b. More diagnoses of chronic brain syndrome.

3. Lodge Adjustment variables from a member's first month in the Lodge predicting probability of 1-61 Days TENURE:

a. Lower work needs.
b. Higher on verbal events in meetings.
c. Lower on liking for others.
d. Lower on general adjustment.
e. Lower on percentage of meetings attended.
f. Lower achievement motivation.

4. Lodge Adjustment variables from a member's last month in the Lodge associated with probability of 1-61 Days TENURE:

a. Higher on social impact.

5. Lodge Attitude-History variables associated with a member's probability of 1-61 Days TENURE (Sample 2):

a. More treatment for alcoholism.
b. More likely to adopt the norm: Stay on the Topic.
c. More likely to adopt the norm: Interrupt a Speaker.
d. Higher on work needs.

B. TENURE: 62-213 Days

1. Mental Status variables predicting a candidate's probability of 62-213 Days TENURE (Sample 2):

a. Lower anticipated degree of improvement.

2. Demographic variables predicting a candidate's probability of 62-213 Days TENURE (Sample 2):

a. Lower age.
b. Fewer diagnoses of chronic brain syndrome.

3. Lodge Adjustment variables from a member's first month in the Lodge predicting a probability of 62-213 Days TENURE:

a. Higher work needs.
b. Less leisure time social behavior
c. More liking for others.

4. Lodge Adjustment variables from a member's last month in the Lodge associated with a probability of 62-213 Days TENURE:

a. Lower self-sufficiency.
b. Higher work needs.
c. More liking for others.

5. Lodge Attitude-History variables from a member's first month in the Lodge associated with a probability of 62-213 Days TENURE:

a. Less likely to adopt the norm: Bring up Interpersonal Relations and Group Process.
b. Less likely to adopt the norm: Proposing Actions Conflicting with Previous Group Decisions.
c. Less likely to adopt the norm: Stay on the Topic.

C. TENURE: 214+ Days

1. Mental Status variables predicting a candidate's probability of 214+ Days TENURE (Sample 1):

a. Less general information.

2. Demographic variables predicting a candidate's probability of 214+ Days TENURE (Sample 1):

a. Fewer incidences of mothers living.

3. Lodge Adjustment variables from a member's first month in the Lodge predicting a probability of 214+ Days TENURE:

a. More talked to by others.

4. Lodge Adjustment variables from a member's last month in the Lodge associated with a probability of 214+ Days TENURE:

a. Higher general adjustment.
b. Lower social impact.
c. Less leisure time scoial activity.

5. Lodge Attitude-History variables from a member's first month in the Lodge associated with a probability of 214+ Days TENURE:

a. More likely to adopt the norm: Bring up Interpersonal Relations and Group Process.
b. Less likely to adopt the norm: Pointing out and Evaluating Behavior of Others.

Mental Status Examination variables suggest that short stay Lodge members were viewed as having a higher anticipation of improvement upon entering Fort Logan, with longer tenure groups being rated lower on this variable. Further, short stay persons were more often rated as "dangerous to others" (at Fort Logan, an infrequently used denotation) by the Mental Status examiner. An anti-social component may be indicated here for those Lodge members who leave the group within the first two months.

Analyses of demographic variables suggest that patients who are in the Lodge 61 days or less are more likely to have had brain damage, and more previous admissions to Fort Logan. Lodge members whose tenure was 214+ days typically do not have mothers living; this, of course, eliminates one possible alternative living situation to the Lodge (i.e., a resource outside of the Lodge). Results of the Chi square analysis between short stayers and long stayers (Table 8) corroborates this finding and indicates that long stayers also are less likely to have fathers living and are older. Thus, it appears the long stayers resources are more limited.

Lodge-collected data regarding "adjustment" suggests that members with 1-61 days of tenure have low work needs, quite the opposite of higher tenure groups who have higher MIQ total scores. There is also the indication of lower liking scores for low tenure men, where high tenure members report liking the other members much more. Further, the general adjustment (work, personal and social combined) scores are high for long stayers, low for short stayers. Also, there is an indication that short stayers are talked to less, are less self-sufficient, attend a smaller percentage of the Lodge's regular meetings, have lower achievement motivation and have higher superficial social impact. It can be seen that these findings tie together rather well, most of them clearly supporting logic and common sense. The Lodge long stayer appears to have certain characteristics (mostly social) that eventuate in his receiving a high score for general adjustment, and thus, tend to relate to long tenure.

The results from the Lodge Attitude-History variables suggest that short stayers are more likely to desire direct and confronting interactions with other Lodge members. They endorse the norms of speaking directly to the topic and interrupting the speaker when they feel it is necessary. These findings agree with earlier results suggesting that short stayers tend to be more anti-social. Further, they have a stronger work history 2 years prior to joining the Lodge. Longer staying members tend to reject norms that involve speaking directly, proposing conflicting action and pointing out particular members to evaluate their behavior. Taken together, these findings suggest that older, established members are following certain mores against "rocking the boat" and that short stay members do not abide by these unspoken rules. The findings presented for Lodge Attitude-History variables are supportive of those noted for the Lodge Adjustment variables. Herein lies some indication as to why short stayers are talked to less, like the other members less and so on.

The effect of the formulas outlined and interpreted above is to provide a set of important variables that may be measured and used to ascertain, before a candidate joins the Lodge, how his amount of earnings might compare with others and approximately how long he may be expected to remain in the Lodge Then, after a man would have joined the Lodge, his scores on the LODGE measures could be used to help in further anticipating what his progress might be. This knowledge could guide those responsible for improving the Lodge environment as to what might be suggested to enhance certain members' experience and development. In concluding the remarks in this respect, it may be of interest to note that 14 Mental Status variables, 6 demographic, 9 Lodge Adjustment and 7 Lodge Attitude-History variables were involved in the predictive formulas, a total array of 36 predictor variables.

In addition to identifying the variables with predictive power, the formulas provide the information on the relative importance of each. While no exact weights are specified, the contributing variables are listed in the order of their importance. The top variable in each formula is most important, with the bottom one contributing least. In fact, it was determined by a correlation shrinkage formula that where over four variables appear in a formula, the bottom two are generally of little value. By using this rule of thumb, it would be possible to eliminate 5 variables from the 36 mentioned above; namely, Achievement Motivation, Percentage of Meetings Attended, Inappropriate Behavior, Movement Away From People and Recent Memory Disturbance. This procedure would reduce the variables to be studied by Lodge personnel to 31 (that is, for predicting INCOME and TENURE).

Correlations were generated between INCOME and changes over certain periods of time in LODGE variable scores. Study of these change score coefficients reveals some interesting comparisons with the formulas discussed above.

(Operational definitions of the 5 types of change scores--Beginning, Mid, Post-Mid, Final and Extreme--appear in Appendix II.) The Post-Mid, Final and Extreme change scores for being talked to, appropriate Lodge social behavior, general adjustment and social impact all correlate significantly with INCOME. These results support the formulas generated by the regressions. They suggest, further, that instrumentation regarding general adjustment and social impact may be measuring the same thing. The score for verbal events, as part of the predictive formula, is thrown into doubt by its negative correlation with INCOME in its Final change score. It could be eliminated from the predictive formula in Table 4.

The change score data (Table 9) are of limited usefulness relative to TENURE. The fact that an initial, positive change in social impact (SIS) is correlated with long tenure supports the predictive formula. Also, a positive change in the Final rating of participation in the group (IPPS) differentiates "long stayers" from "short stayers" and this is consistent with the finding that "long stayers" are more a part of the group than "short stayers."

The other type of longitudinal analysis, the time series graphs, provide still another kind of support for the predictive formulas set forth above. (See Appendix V, Figures 1, 2 and 3 for illustrations of the time series graphs.) Inspection of the graphs reveals that they partition the LODGE predictor variables into 4 classes: (1) GLBS, BMMA, PARS, AMRS and IR; (2) MIQ and WAQ; (3) SIS, LARS and IPPS; and (4) LAQ-1, LAQ-2, LCQ-1 and LCQ-2. Generally a predictive formula contains not more than one variable from each of these groups. In other words, in the predictive formulas, each variable makes its independent (to a significant degree) contribution to the predictions. The patterns apparent in the graphs--allowing general partitioning by visual inspection into 4 classes of predictors--lend support to the structures of the predictive formulas.

Situational variables. From the correlations of monthly mean predictor scores with INCOME (Table 11), one finds that a large number of "crises"--as discussed in the meetings--is associated with low INCOME for the entire Lodge. Apparently, the powerful personal predictors for INCOME, being talked to, liking and appropriate social behavior, do not constitute valuable situational predictor variables when averaged across subjects. Rather, the data suggest that monthly means for the Business Manager's Monthly Assessment, dependency, general adjustment, talking, social impact and work attitudes may be suitable situational predictors. Further work might reveal that certain of these instruments could produce very useful situational predictors.

The final discussion regarding situational variables in relation to Performance in the Lodge has to do with the normative structure of the Lodge as identified by data from the Group Behavior Questionnaire. No direct predictions or correlative relationships may be drawn from the Return Potential Curves that this data produced (Appendix IV, Figures 1-12). What may be said, however, is that the prohibitory and restrictive nature of the norms may be having a limiting effect on the entire operation. When compared with the norms of a group such as the Denver University group process seminar, the narrowness and negativeness of the Lodge norms become apparent. These norms may be contributing to loss of income, to a shortening of tenure, and to limitations in problem solving and decision making. One example which may be provided by the present research is the finding that members who are more direct and confronting drop out of the program early. A great deal more work must be done to elucidate these group influences, but the curves exhibited in the paper are symptomatic of an area that needs serious attention.

Exit from the Lodge

Personal variables. In order to make the discussion of the Voluntary and

Involuntary Exits easier to follow, the predictive formulas generated by the multiple regressions are stated below in the same manner that they were presented under "Performance in the Lodge." For the criterion variable, Voluntary Exits, then, the predictive formulas are described below.

1. Mental Status variables predicting a candidate's probability of becoming a Voluntary Exit (Sample 1):

   a. More general information.
   b. More often recent memory disturbance.
   c. More movement away from people.
   d. Smaller vocabulary size.
   e. Less cooperation.
   f. More positive attitude toward examiner.

2. Mental Status variables predicting a candidate's probability of becoming a Voluntary Exit (Sample 2):

   a. More recent memory disturbance.
   b. More general information.
   c. Less sexuality conflict.

3. Demographic data predicting a candidate's probability of becoming a Voluntary Exit (Sample 1):

   a. More often "separated" (marital status).
   b. More times admitted.

4. Demographic data predicting a candidate's probability of becoming a Voluntary Exit (Sample 2):

   a. More mothers living.

5. Lodge Adjustment variables (collected during a member's first month in the Lodge) predicting the probability of his becoming a Voluntary Exit:

   a. Less talked to by others.
   b. Less liking of others.

6. Lodge Adjustment variables (collected during a member's last month in the Lodge) predicting the probability of his becoming a Voluntary Exit:

   a. More leisure time social activity.
   b. Lower general adjustment.

7. Lodge Attitude-History variables associated with a member's probability of becoming a Voluntary Exit (Sample 1):

a. Better work history 2 years prior to the Lodge.
b. More likely to adopt the norm: Staying on the Topic.
c. Less likely to adopt the norm: Proposing Actions in Conflict with Previous Group Decisions.
d. Poorer work history since age 18.
e. More negative attitudes about the Lodge.

8. Lodge Attitude-History variables associated with a member's probability of becoming a Voluntary Exit (Sample 2):

a. Better work history 2 years prior to the Lodge.

For criterion variable, Involuntary Exit, the predictive formulas are described below.

1. Mental Status variables predicting a candidate's probability of becoming an Involuntary Exit (Sample 1):

a. More blocking.
b. Less word use dysfunction.
c. Less recent memory disturbance.
d. Less general information.
e. Less hostility.

2. Mental Status variables predicting a candidate's probability of becoming an Involuntary Exit (Sample 2):

a. Higher prognosis.
b. More confabulation.
c. Less sexuality conflict.
d. Less movement toward people.
e. Less cooperation with examiner.

3. Demographic variables predicting a candidate's probability of becoming and Involuntary Exit (Sample 1):

a. More fathers living.
b. Fewer veterans.
c. Higher social class.
d. More jobs in the 2 years prior to admission to Fort Logan.
e. More admissions to Fort Logan.
f. Lower family income.

4. Lodge Adjustment variables (collected during a member's last month in the Lodge) associated with the probability of a member's becoming an Involuntary Exit:

a. Less leisure time social activity.

5. Lodge Attitude-History variables (collected during a member's first month in the Lodge) associated with the probability of a member's becoming an Involuntary Exit (Sample 1):

a. More Fort Logan hospitalization.
b. Less likely to adopt the norm: Proposing Actions Conflicting with Previous Group Decisions.
c. Poorer work history 2 years prior to the Lodge.

6. Lodge Attitude-History variables (collected during a member's last month in the Lodge) associated with the probability of a member's becoming an Involuntary Exit (Sample 2):

a. Less likely to adopt the norm: Participate Actively in Group.

It may be proposed that the Mental Status Examination findings reported above suggest that Involuntary Exits may be among the less severely disturbed members. In any event, these findings contraindicate a possible hypothesis that the most severely disturbed patients in the Lodge are being removed from the program by the Lodge men and/or hospital staff.

Interpretation of findings using psychiatric symptomatology for Voluntary Exits must include the notions that they are fairly bright, and also were rather uncooperative and negativistic with Fort Logan examiners when in the hospital. Regarding this group one might speculate that they may choose to leave the Lodge because they feel they can do better and because they choose not to cooperate with the program.

The demographic and admission diagnosis data suggested that all exits tended to have repeated admissions to Fort Logan, albeit this predictor ranked higher on Voluntary Exits than for Involuntary. Mothers Living predicted

Voluntary Exit, whereas Fathers Living predicted Involuntary Exit. A Marital Status of "separated" predicted Voluntary Exit. Interestingly enough, higher Social Class predicted Involuntary Exit.

Regarding Lodge Adjustment variables, there is the suggestion that even from the beginning, Voluntary Exits were characterized by lower scores on Liking for Other Members. Also, these members were talked to less by the other members. On the other hand, in their last month in the Lodge, they demonstrated a higher degree of Leisure Time Social Activity. This latter behavior was presumably, with people outside the Lodge. To complete this pattern, the last month's scores on general adjustment was low. Thus, those who left the Lodge on their own volition were unsuited from the beginning and were never able to adjust. As would be expected of 9 voluntary exits, 8 left the Lodge prior to their 213th day of tenure. Consistent with these descriptions was the better work history two years prior to joining the Lodge. An implication of an alternative resource outside the Lodge. Moreover, the attitudes of the voluntary exit group were rather negative.

A glance at the formulas yielded by the Lodge variables revealed that members who were expelled had experienced less hospitalization, an implication that they might resist returning to the hospital. In addition, their low record on work history implied a lack of alternative resources in the community.

Surprisingly, the test for differences between Voluntary Exits and Involuntary Exits across Lodge Attitude-History, Work History two years prior to the Lodge and Hospital History failed to support the powerful predictive ability of the Work History variable in the formulas for Voluntary Exits. However, these tests did support the indication of low predictive power for Lodge Attitudes

(from the LAIS), which ranked last in the formula for Voluntary Exits as well as the non-predictive power for the Lodge Attitude (from the PLIS). On the other hand, the tests failed to indicate the power of Fort Logan Hospitalization History as a predictor of Involuntary Exits. While these tests largely did not support the variables in the predictive formulas, their effect was to leave the formulas unaltered.

In looking through the change scores in Table 14, one finds little support for the predictive variables in the formulas for Voluntary Exits. For Involuntary Exits, what one would expect occurs; declining change scores on General Adjustment (IR) portends an involuntary exit, declining change scores on Leisure Time Social Activity (LARS) makes the same prediction, as does declining change scores on Self-sufficiency (GLBS). A higher Mid score for Liking of Others related to a greater number of Involuntary Exits. A change for the worse on the Final Liking of Others relates to Involuntary Exits. It is perhaps most noteworthy that, of the change scores, two types hold the most promise for differentiating Voluntary and Involuntary Exits. These are the Business Manager's Monthly Assessment (BMMA) and being Talked to by Others (LCQ-2). Consistently declining change scores on the BMMA portend Involuntary Exit. The same appears to be true of the LCQ-2. The BMMA does not predict Voluntary Exits, and Voluntary Exiters are more likely than Involuntary Exiters to be talked to by others. In general, it may be said that the change scores do lend support to the formulas for predicting Involuntary Exits; but they do not support or contradict the formulas for Voluntary Exits.

The change scores were correlated with Total Exits (EXIT), exits one month after the change score period, two months and three months (EX-1, EX-2 and EX-3). Surprisingly, for EXITS, increasing Mid change scores on Liking for Others are correlated positively with more EXITS. However, as would be expected, decreasing

Post-Mid changes in scores spelled impending exit on many of the variables (all that have significant relationships) to some extent across both types of exits. It may be said that decreasing change scores represent one of the prime signals of impending exit. However, they would seem to be most useful for predicting involuntary exits. Of all the Personal Predictor Change scores, the Business Manager's Monthly Assessment together with the Self-sufficiency Scale (GLBS), the social activity measure (LARS) and the measure of being talked to by others (LCQ-2) demonstrated the greatest power to predict Involuntary Exits. Moreover, it would appear possible that declining change scores on these instruments might predict an Involuntary Exit one to three months in advance. A combination of the predictive formulas with change scores for these 4 scales should make it possible for a Lodge manager to become aware of a very large percentage of threatened exits (in addition to those that become very obvious without the help of any measures other than day to day incidental observation). Some impending exits, particularly involuntary ones, are easy to detect, but some occur completely by surprise. It is for these latter ones that reliable and valid measures would be most useful. A promising lead in developing predictors for voluntary exits is the finding that declining evaluations of social impact combined with early increasing scores on work attitudes may be related to voluntary exiting.

The time series graphs appear to lend support to the assertions made about change scores relative to exits. The test of actually predicting exits from a set of individual graphs showed that change scores--as pictured by the graphs--could predict exits quite well, as 11 out of 12 were predicted correctly in that experiment.

Situational variables. It is worth repeating here that the test to see if Total Exits per month could differentiate the 13 months of the data collection

period produced no differences. The outcome indicated that Exits per month had a random distribution. Therefore, it would be very unlikely that one would find any systematic relationships between Exits per Month and the monthly mean scores of any of the predictor variables. Furthermore, if one were to get a correlation or two, they would probably be spurious. On the basis of these results, no further efforts were made to retest for relationships between group scores on Exits per Month. While no statistical bases were established regarding the group norms and their relationship to exits, it is worth noting again their restrictive, prohibitive nature as contrasted with norms that would aim to reinforce desirable behavior rather than limiting and punishing only. It is true that the norms as measured apply only to meetings. More comprehensive and detailed research will have to settle the matter of these norms extending to the whole Lodge experience. If this latter condition were the case then one would expect that efforts to help the men to restructure the norms might be a first order of future business.

Post-Lodge Functioning

The tests for differences between pre-Lodge and post-Lodge functioning support the findings in previous studies (Fairweather, 1964 and 1969) that the benefits of the Lodge experience are largely limited to a member's tenure in the Lodge. The fact that longer stayers experienced less deterioration in level of work during the "post-Lodge" period than did Non-Member referrals suggests the Lodge may have been a beneficial experience in this respect. The same implication holds for the finding that long staying Lodge members resided in less dependent living facilities than did Non-Members. Nevertheless, these data do not substantiate the hypothesis that the Lodge experience prepares the members for an independent life in the community. (Tables 17, 18, 19 and 20 contain these results.) The finding that Non-Members experienced less intensive

hospitalization after their contact with the Lodge apparently reflects the probability that most Non-Members went to some non-hospital alternative (such as a halfway house, boarding home, etc.) shortly after refusing or being rejected by the Lodge, while the more typical experience for a Lodge member who left the program was to return to the hospital for varying lengths of time.

While in the Lodge, a member's average earned, monthly income during the data collection period was $92 a month. Also, the men organized, maintained and operated their residence including all shopping for and preparing of food with virtually no supervision. During the two years prior to the Lodge and in the period after exiting from the Lodge, in no case did any member achieve these levels of functioning. It would seem justified to state, then, that during his Lodge tenure, a man performs better socially and in work than in any other, available program. From this point of view, the desirable objective for a Lodge member may not be to see the Lodge as a transitional preparation for life in the community on an independent basis, but rather as a new life style more suited to his needs than any available way of community life elsewhere.

Implications

The results indicate that the referrals to the Lodge were, indeed, seriously disabled and met the criteria for "long stayers." Therefore, with proper caution, the findings of this research concerning personal variables might be generalized to other current or prospective Lodge-like settings where the group membership meets the criteria established. The generalizability of the results regarding situational or "contextual" influences depends, of course, upon the extent to which other situational parameters approximate the ones studied.

Obtaining a sufficient number of referrals to the Lodge at the time openings are available has been a continuing problem for the Fort Logan program. If this type of program is to exist, a first order of business is to assure that adequate referrals are forthcoming. This objective may require intervention at times in the process by which treatment personnel make referrals. Regardless of who should make the interventions, the data gathered and analyzed in this research provide information about the functioning of Psychiatric Teams, at least at Fort Logan, that can help a Lodge Manager and the hospital administration to identify problems related to referrals to the Lodge. The responses to the Staff Questionnaire indicated that staff attitudes were favorable toward the Lodge, but not favorable enough. It also indicated that Vocational Counselors are more likely to be concerned about and to behave more favorably toward the Lodge. This is to be expected, since the Rehabilitation Counselors are primarily responsible for making the arrangements for transferring a patient to the Lodge. Also, it is typically the Counselor who receives feedback regarding the progress of the patient in the program. Moreover, the Counselor is a member of the Vocational Services Department at Fort Logan; and the Lodge is administered under the auspices of this department. The formation of a hospital wide referral and screening committee with representation from each treatment unit, as well as an administrative representative, might promote broader participation in, and thus increase the responsibility for, the referral process. Continuing, public support of the program by the hospital administration might also help. At the same time, a balance must be maintained between enhancing the involvement of hospital personnel and promoting independence of the Lodge group.

The study of Mental Status and Demographic variables relative to referral and entry into the Lodge makes it possible to do a much better job of selecting candidates who will probably succeed in the work and living situation in the

Lodge. Discussion of these variables with the treatment teams and/or a referral committee might improve selection as well as generate a more adequate number of referrals. Combining the use of these variables with the tests that Goss and Pate (1967) have used to predict successfully post-hospital adjustment might make a remarkable difference in the Lodge experience. It could minimize some of the uncertainties regarding referral in the present approach and cut down on the failure experience that occurs when a candidate is rejected, or a member has to be expelled.

Regarding the matter of entry into the Lodge, careful attention to the personal variables found to be typical for members could suggest some ways of acquainting new members with the Lodge so that early exits might be avoided. And, these early "quits" or expulsions account for about 27% of the exits (1-61). Perhaps some attention to liberalizing the norms could affect this early exit rate, too.

It was noted earlier that the current members seem to select into the program those individuals who are similar to the existing membership. As time passes, the group may include increasingly more members who "go along with the crowd." After a certain amount of attrition, it may be true that the membership loses the necessary leadership skills to organize and function as an effective task oriented group. Fairweather, et al. (1969) have demonstrated the need for a group constituency of about one half relatively "socially active," leadership types of chronic patients and one half who are more withdrawn. Increasing the number and improving the selection of referrals would appear to be a prerequisite to dealing with this problem. In addition, group work with the Lodge membership might encourage them to be more flexible in their acceptance or rejection of candidates. Perhaps a quota of leadership-non-leadership members could be established and the membership could choose from among candidates referred from the category necessary to maintain a balanced constituency.

As to performance in the Lodge, appropriate intervention could be achieved with flagging members to help them to recognize the need for improvement on some of the critical variables of Lodge experience. These critical variables appear to be: adequate and frequent enough communication with other members; the necessity to demonstrate, or at least cultivate, a liking for several of the other members; and the necessity to engage in at least a minimum of sociable activity during leisure hours. Assisting the group in developing group oriented recreational activities of their choosing might enhance behavior in these areas; for example, a physical education program. Work in sufficient amount and quality is very important. However, this is probably one area of the Fort Logan Lodge experience that received continuing and urgent attention. Attention and effort directed to the other crucial areas of behavior might help certain poorly functioning members to discharge their share of Lodge duties better, including work. The predictive formulas for income, tenure and exits can provide Lodge managers with useful tools for finding out what needs to be done, with whom it needs to be done and when. Furthermore, these statistical-looking formulas may be reduced to simple graphs that would be easy to construct and interpret. Such records might prove to be very interesting to the men as self-records of their own achievements. This kind of group effort could replace some of the restrictive norms with reinforcers of desirable behavior. Improvement in a very difficult area of life, proved by a graphic record, could be a powerful stimulant to striving for more adequate skills.

It is of particular interest that impending exits, or more specifically, involuntary exits, may be predictable within one to three months prior to their occurrence. Continuously declining evaluations by the Business Manager and continued negative change scores on the GLBS were demonstrated to have promise in this regard. Although declining scores on the SIS may be a useful indicator

of voluntary exits, more study is needed to enhance predictability of this type of drop-out.

Previous mention has been made of the apparent need for assisting the group in developing norms that are more flexible and tolerant, that would allow for open communication, novel solutions to nagging problems, and that would permit change. The initial establishment of a "social contract" by the group might be encouraged by a skilled group consultant. In this way desirable norms could be made explicit through a negotiated agreement among members. Once established, this contract would be implemented behaviorally and reviewed periodically through formal feedback sessions with the group consultant. Observations of the Lodge operation suggest that frequent meetings with the group consultant might be required initially. However, eventually these might be required only every month or two. It has been pointed out that more research is needed to further identify critical group process variables associated with certain outcomes in the program. However, it certainly appears that the Lodge group would not be adversely affected by skilled assistance in developing and maintaining commitment to less restrictive norms.

The performance in the Lodge also may be affected by another situational variable. A danger in the Lodge--as in the hospital--is a reluctance on the part of the staff to relinquish all of the responsibility that the men can possibly handle. In this regard, the data show five phenomena which may be significant: (1) the Business Manager attended over 90% of the meetings held in the 13 months during which the data were collected; (2) in 9 of the 13, his number of verbal events per 100 minutes of meeting time were second only to those of the chairman of the meeting (a Lodge member); (3) in virtually all cases, he dealt with and transported to Fort Logan members who required psychiatric or medical attention; (4) in virtually all cases the Business Manager solicited, negotiated and obtained the contracts for work; and (5) when problems

of finance and other crucial matters arose, usually they were not placed before the Lodge's Board of Trustees, but rather before the executive staff of the Vocational Services Department at Fort Logan.

The Business Manager's job (known in other such programs as the Lodge Coordinator) is a difficult and isolated one. It requires continual flexibility in assuming and giving up responsibility. Recognition for the skill and judgment required to make these continuous shifts in responsibility may come rarely, if at all. And, provisions for other job assignments and job security, should the Manager do his job well enough to eliminate the need for his services at the Lodge, may be overlooked. The risks inherent in delegating responsibility are often great. On the other hand, one cannot know how much may be delegated until it is put to the test. Perhaps the outer bounds of such shifting of responsibility have already been reached at the Fort Logan Lodge. But another look, another effort in the light of these data could conceivably yield results as yet hardly envisioned.

As for post-Lodge functioning, this research has produced little new information in this very difficult aspect of the problem. The benefits gained by the members in the Lodge do not seem to carry over to post-Lodge functioning in most cases. This finding is commensurate with Fairweather's work. Thus, the need for improving Lodge tenure takes on added importance. Although no research results are available, the use of crises intervention techniques, sometimes combined with short term hospitalization, seem to be a promising approach to enabling Lodge members to sustain acute episodes and extend tenure. Also, the capacity of the peer group to prevent serious disruptions and support group members during personal setbacks should not be overlooked. Data was not collected on these group efforts, but observation of the Lodge over a two and a

half year period leads to the conclusion that such efforts prevented premature exit in several cases.

In closing the remarks in this section, it is fitting to comment on the responses of certain people in the community about the Lodge. Perusal of Table 20 leaves one with the impression that the better people know the men, (especially, perhaps, in "normal" social roles) the higher their regard for them. For example, the neighbors hardly knew the men. Their responses were largely neutral. But employers, who knew the men much better--some over extended periods of time--were much more enthusiastic. In fact, they gave the Lodge the finest salute any business or group can earn: repeat business!

SUMMARY

The problem to which this project addressed itself was the serious and perpetual problem of chronic institutionalization of psychiatric patients. As a response to an urgent need to discover better methods for rehabilitating refractory, long stay patients, the Lodge program came into being. It is a community based, group, social and work enterprise. The prototype program was developed at the Palo Alto Veterans Administration Hospital by G. W. Fairweather and his associates (1964, 1969). The Lodge makes use of a small group approach and emphasizes the need to recognize and maximize the capabilities of chronic patients by providing the opportunity for them to express whatever abilities they possess. Work for pay is used as a primary rehabilitation tool in the program. The ultimate goal is to develop an autonomous, interdependent group. Therefore, only one staff member is involved. From the beginning, continual efforts were made to transfer the responsibility for the program to the patients.

In the present project, chronic male patients at Fort Logan Mental Health Center were assisted in developing a Lodge program in mid-town Denver, Colorado. The enterprise began in April, 1967, under the auspices of the Vocational Services Department at Fort Logan. The Fort Logan Lodge typically had a membership of 15 men. It has now become a non-profit corporation and has developed into a janitorial business. Research has been an integral part of the program since its inception. First a pilot study was carried out, followed by the research reported in this paper.

Turning from the general programmatic setting of this project to its particular purposes, the aims of the research were to evaluate the extent to which the Fort Logan Lodge actually did provide opportunities for long stay patients to express the capabilities they possessed; to assess the degree to which

responsibilities were actually turned over to the men and the extent to which the members were able to handle them; to assess the degree of rehabilitation for returning to an independent existence in the community that occurred as a result of living and working as a member of the Lodge; and to identify, describe and test systematic relationships among group and individual behaviors, both prior to and during the Lodge experience and the important outcomes from that experience.

To achieve these aims, certain behaviors of Fort Logan staff members were sampled; the behavior of members and the processes in the Lodge were continually monitored; and a follow-up of the men who dropped out was made. The theoretical model that guided the investigation was the proposition that behavior is a function of personal characteristics and environmental conditions: $B=f(P,E)$. Proceeding from this assumption, the "outcomes" deemed most important were the following: referral to the Lodge by Fort Logan treatment teams; entering, or failing to enter, the Lodge after referral; performance while in the Lodge; exit from the Lodge; and post-Lodge functioning. From these statements, it becomes evident that the study included three basic classes of subjects: non-referrals, referrals-members and referrals-non-members. The emphasis, of course, was on the Fort Logan patients who were referred to the Lodge, and especially those who entered the Lodge.

From the inception of the Lodge program in July, 1967, to the end of the data collection period for this study (December 31, 1970), there were 67 men referred to the Lodge. Of this number, 14 were rejected by current members; 5, after reconsideration, decided not to join and 48 entered the program. It is noteworthy that both referral and joining were on a voluntary basis. In studying the subjects referred to the Lodge, a random sample of 102 subjects from the general Fort Logan male population was used for comparative purposes. To

study the outcomes, referral and entry to the program, it was necessary to sample knowledge, behavior and attitudes regarding the Lodge on the part of Fort Logan staff members who made up the Adult Psychiatric, Alcoholism and Crises teams. Thus, there were three samples studied: Lodge referrals, Fort Logan male patients and the treatment staff.

The five outcomes or criterion variables--referral, entry, performance in the Lodge, exit and post-Lodge functioning--were studied within the framework of three basic research questions.

1. What relationships exist between selected individual or personal characteristics of Lodge candidates and members and the five criteria?

2. What relationships exist between selected situational (environmental) influences and the criteria?

3. How does behavior during Lodge membership compare in productiveness and constructiveness to behavior prior to and after the Lodge membership?

As for referral and entry to the program, the personal variables on which data were collected were all of the appropriate items from the Fort Logan Mental Status Examination (MSE), which was typically administered once within the first month or two of each admission to the hospital. Also, demographic data were collected from the Admissions Form, which was administered each time a patient was admitted to the hospital. The situational variables studied relative to referral and entry were knowledge, behavior and attitudes toward the Lodge on the part of Fort Logan treatment staff. Data were collected by use of a Staff Questionnaire on the Lodge Program. Ninety-four staff members responded to this questionnaire from a total sample of 214 (42%).

The personal variables relative to performance in the Lodge included the MSE and demographic data plus the following data collected by observation, interviews, questionnaires and rating scales.

1. Thrice weekly observation of Lodge meetings to ascertain attendance and participation of the members and the Business Manager (IPPS).

2. Thrice weekly observation of the members' social activity during leisure hours (LARS).

3. An interview every 5th day with each member to ascertain with whom he talked and how long he talked with each other member during the 24 hour period immediately preceding the interview (LCQ).

4. A monthly rating from the Business Manager as to each member's degree of adjustment to living and working in the Lodge during the past month (BMMA).

5. A monthly report from the Business Manager relating the amount of income earned per week by each man. This information was used to compute an index score based on proportion of income.

6. Bi-monthly ratings by the investigators on:

   a. Motivation to achieve, or avoid failure (AMRS).
   b. Self-sufficiency or dependency (GLBS).
   c. Personal, Interpersonal and Work Adjustment (IR).
   d. Personal capability for independent life in the community (PARS).
   e. Social Impact Scale (SIS).
   f. Work Attitude Questionnaire (WAQ).
   g. The extent to which the subject liked each other member (LAQ).

7. Tri-monthly administration of the Minnesota Importance Questionnaire (MIQ) to ascertain a man's personal needs on the job.

8. Twice during the study the Group Behavior Questionnaire (GBQ) was administered to measure the degree of agreement with 12 group norms.

9. Once during the study:

   a. Lodge Attitude Interview Schedule (LAIS).
   b. Post-Lodge Interview Schedule (PLIS)
   c. Personal History Interview Schedule detailing work, residence and hospital history--from the S.

Data also were collected on the following situational variables relative to performance in the program.

1. Observation of Lodge meetings (thrice weekly) to ascertain:

   a. General effectiveness of meetings (GR).
   b. Nature, intensity and disposition of issues dealing with work, problems of living and crises.

2. Twelve group norms plotted as "Return Potential Curves" from GBQ data.

3. Group monthly means on BMMA, GLBS, IPPS, IR, LARS, LAQ, LCQ, MIQ, SIS and WAQ construed as "milieu" variables.

For the study of exit from the Lodge, the same personal and situational data that were described above for performance in the Lodge were used.

For post-Lodge functioning, data collected from the Personal History Interview Schedule were utilized. Work, residence and hospital experience after leaving the Lodge were used as specific Criteria. The personal variables studied in their relationships to these Criteria were the same ones as were used in studying performance in the Lodge, except that no MSE or demographic variables were included. No situational variables were identified to be studied concerning post-Lodge functioning.

One final kind of data gathering was accomplished. In order to sample "community response" to the program, interviews were completed with 5 immediate neighbors and 9 current and former employers of the Lodge men.

The techniques for analysis that were used were: stepwise multiple regression, analysis of variance, Chi square, t-test, Mann-Whitney U Tests, correlations and factor analyses. These techniques were hampered by the problem of the small number of subjects. Some of the operations on Lodge observed data had to be done using as few as 10 subjects. To counter this problem, high levels of significance were set in reducing the number of variables ($p=.01$ rather than the usual .05), replications were completed and time series graphs were used. The conclusions were arrived at by interpretation of the empirical results from statistical analyses, with due respect for the error that may have

intruded into the operations. In addition, the time series graphs were constructed for the dual purpose of making possible visual study of the changes which occurred as well as furnishing rough checks against the mathematical data. Also, correlational analyses of change scores were used to try to assess changes in the data over time.

The major conclusions from the data analyses for this study are the following:

1. The Fort Logan treatment teams, for the most part, are following the recommended selection criteria for referring patients to the Lodge. The referrals, therefore, are some of the most chronic patients at the hospital.

2. No statistically significant differences among teams regarding knowledge, behavior and attitudes toward the Lodge were found to be related to referrals, the number of men who are rejected, the number who refuse to enter, or those who join the Lodge.

3. However, the Staff Questionnaire revealed that, with the exception of Vocational Rehabilitation Counselors, the attitude on the part of all team personnel is only slightly favorable. This information should be of use to the Lodge Manager and the Fort Logan Administration in their efforts to maintain a steady stream of referrals to the Lodge, a matter upon which the viability of the program depends.

4. Nineteen Mental Status and demographic variables were found to differentiate between the general population of adult male patients at Fort Logan and patients referred to the Lodge. Furthermore, Non-Members differed from Members on 5 Mental Status, 4 Demographic and 2 Attitude variables, as well as on 1 Residence variable. These constitute rough "formulas," which, if used with other predictive tests (Goss and Pate, 1967) could make more efficient and meaningful the recognition and choice of referrals. These "formulas" may be

used by team members who are interested in placing their eligible long stay patients in a self-help program such as the Lodge. The variables identified also may be useful to current Lodge members in identifying ways of improving the selection of members.

5. Some 21 predictive formulas were identified that relate to performance in the Lodge. They include Mental Status data, demographic and Lodge-observed variables, all of which are simple data to obtain. Most of these variables may be easily plotted in graphic form for visual rather than statistical interpretation. The formulas may be used by innovators who wish to develop programs for chronic mental patients, by individuals participating in already existing programs and by personnel of public and private psychiatric hospitals and mental health centers who are interested in developing or improving programs for chronic mental patients. The formulas may be used by researchers who are interested in developing, perhaps, one or two scales that could combine the usefulness of the entire 21 formulas. The data gathered during this study is punched on IBM data cards. Thus, it is available to anyone who might want to perform operations on it additional to those that have already been completed.

6. It was found that 8 Lodge-observed variables, when averaged across current members, by months, were significantly related to total monthly Lodge Income and general level of adjustment. In regard to conclusions about other situational variables related to performance in the Lodge, one speculation was presented: the normative structures plotted from the data suggest that Lodge norms are largely restrictive and tend to prohibit behavior rather than furnishing much positive reinforcement. This information could be useful to researchers and Lodge personnel in their efforts to develop a more "supportive" living and work situation.

7. Fourteen predictive formulas were generated that relate to exits from the Lodge. These deal with personal variables. The situational variables, group norms, may apply even more to the phenomenon of exiting. Further intensive work is called for to identify more broadly (than in meetings) and to study the nature and effect of these highly important influences on behavior.

8. As for post-Lodge functioning, the conclusion must be tentatively posited that experience in the Lodge is its own reward for the chronic patients. While in the program, men who had never worked in their lives, young and old, achieved a rather remarkable level of functioning. Others who had a steady history of occupational and social decline prior to entering the Lodge also showed notable achievements in earnings, adaptability to the group, general improvement in appearance, community interaction and self-respect. Even some very severe cases who were not able to improve enough to hold their own and stay in the group showed some of these favorable responses to the Lodge environment while they were there. However, continuation of these benefits does seem to require the Lodge environment. The "growth" experiences are either not enduring enough to enable a member to live independently once again in the community, or they are simply responses to a more appropriate environment for these particular people. It has been said earlier that the Lodge provides an opportunity to express existing capabilities. It would appear that one must not, or need not, expect a learning process through which durable change takes place.

If this is the case, the objective for the patient would be to stay in the program. In this connection, it is interesting to note the varying lengths of stay in the Fort Logan Lodge. Twenty-seven percent stayed 1-61 days, 27%, 62-213 days; 25%, 214-547 days; and 21%, 548 days or longer. Of the 15 "charter" members, 4 remained in the program on December 31, 1970, and as of this writing,

three years and nine months since inception of the Lodge, these 4 are still in the program. The average stay has been about one year. For the purpose of enhancing the length of stay, some of the predictive variables noted earlier deal directly with tenure. They should provide help to Lodge personnel and the men themselves in making decisions about how and when to intervene to prevent untimely exits.

Some general, perhaps crucial, observations seem warranted on the basis of the numerous variables studied. Leadership among the Lodge membership is needed in order for the group to respond more effectively to the social and work tasks it faces. The referral and selection processes may (and at Fort Logan seem to) mitigate against the entry of leaders into the group. The group norms may (and in the Fort Logan program apparently do) restrict the emergence of leadership from within the group. Without effective peer leadership the need for outside influence increases and, with it, independence of the Lodge diminishes. Without autonomy, the Lodge faces the prospect of becoming a psychiatric institution in the community. The vitality of a Lodge, or other "intentional communities," therefore, seems largely contingent upon positively influencing the variables that influence leadership. If this can be done, this innovative program might become a widely accepted and even more useful alternative to hospitalization for many chronic patients.

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APPENDIX I

THE VARIABLES

A. Criterion Variables--Categories and Specific Outcomes

B. Predictor Variables by Categories

C. Reduced Array of Predictor Variables

APPENDIX I A.

CRITERION VARIABLES--CATEGORIES AND SPECIFIC OUTCOMES

Category	Variable
1. Referral to Lodge	Number of patients referred to the Lodge (in tests involving personal predictor variables). Total number of referrals per treatment team, "total referrals." Ratio of: number of referrals per team/total number of patients per team who met the selection criteria, "referral index." (Used in tests involving Fort Logan team scores.)
2. Becoming a Member	Referred and accepted by Lodge group for membership, but refused to join, "refusers." Referred, but denied membership by Lodge group, "rejects." Together the refusers and rejects are labelled "Non-Lodge." Referred, accepted by Lodge group and accepted membership, "joiners," or "members."
3. Performance in Program	Each member's tenure in the Lodge Each member's portion of total monthly income.
4. Exit	Number of: a. Exits--total b. Voluntary exits. c. Involuntary exits. d. Exits per month. e. Exits 1 month after change score period. f. Exits 2 months after change score period. g. Exits 3 months after change score period.
5. Post-exit Performance	Each member's experience after leaving the Lodge as regarded: a. Work. b. Residence c. Hospitalization All three of these variables were operationally defined as a score computed by the formula: Variable=$\frac{\Sigma AB}{C}$, where: A-Work=status weight as follows: 1. unskilled labor, 1.8 semi-skilled, 1.9 sales, 2.1 clerical, 2.2 skilled, 2.8 supervisory or professional. A-Residence=1. nursing home, 2. hospital-24 hour care, 3. hospital-family care, 4. hospital-halfway house, 5. parents, 6. boarding house, 7. room or apartment, 8. own nuclear family. A-Hospital=1. 24 hours care, 2. family care, 3. halfway house 4. day care, 5 outpatient care, 6. no hospitalization. B=number of days in each weight-class. C=number of days between date of exit from the Lodge and December 31, 1970.

APPENDIX I. B.

PREDICTOR VARIABLES BY CATEGORIES

PERSONAL VARIABLES

Mental Status data

Demographic data

Achievement motivation

Business Manager's assessment

Compatibility with group norms

Self-sufficiency--dependency

Participation in meetings

Percent of meetings attended

Personal adjustment to Lodge

Leisure time activities

Attitudes toward Lodge

Degree to which individual liked other members

Degree to which other members liked individual

Extent to which individual talked to other members

Extent to which other members talked to individual

Work needs

Aptitude for community functioning

Social impact on others

Work attitudes

SITUATIONAL VARIABLES

Group normative structure

Intragroup dependency level per month

Effectiveness of problem solving in meetings

Group level of participation in meetings

Intragroup adjustment level per period

Intragroup social activity per month

Intragroup liking level

Intragroup communication level

Intragroup work attitudes per period

Fort Logan Staff members' knowledge about--attitudes toward--and behavior toward--the Lodge

Types of problems discussed in meetings

Number of crises per month

APPENDIX I C.

REDUCED ARRAY OF PREDICTOR VARIABLES

Class 1. Mental Status

Confusion
Hallucination--auditory
General information
Recent memory disturbance
Confabulation
Depressive thought content
Blocking
Slowing
Flight of ideas
Vocabulary size
Word Use
Anger
Depression
Dress
Inappropriate behavior
People--toward
People--away
Hostility
Sexuality
Things and ideas
Attitude toward recovery
Attitude toward examiner
Cooperation
Disturbance
Isolation
Undoing
Primary diagnosis--severity
Prognosis
Anticipated degree of improvement
Danger to others

Class 2. Demographic

Age
Education
Times married
Veterans status
Social class
Times admitted
Family income
Number of jobs--2 yrs. prior
Father living
Mother living
Single[1]
Married
Divorced
Separated
Widower
Chronic brain syndrome[2]
Schizophrenic
Other psychotic disturbances
Psycho-neurotic
Personality disturbance
Sociopathic personality
Transient situational personality disturbance

Class 3. LODGE: Adjustment and Social Activity

Minnesota Importance Questionnaire
Work Attitudes Questionnaire
Achievement Motivation Rating Scale
General Lodge Behavior Scale
Individual Report
Social Impact Scale
Lodge Affect Questionnaire--Liking
Lodge Affect Questionnaire--Liking
Lodge Communication Questionnaire--Talked
Lodge Communication Questionnaire--Talked to
Lodge Activity Rating Scale
Individual Participation Schedule
Percent of Meetings Attended

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[1]The next five items produced binary scores, which together measured the variable, "Marital Status."

[2]The next seven items produced binary scores, which together measured the variable, "Diagnosis."

APPENDIX I C.

Class 4. LODGE: Personal Attitude, History

And Group Behavior Questionnaire Scores

Attitudes toward the Lodge--
Lodge Attitude Interview Schedule
Attitudes toward the Lodge--
Post-Lodge Interview Schedule
Work History--2 yrs. prior to Lodge[1]
Work History--since age 18
Residence History--since age 18
Hospital Tenure--other than Fort Logan
Hospital Tenure--Fort Logan
Number of months treated for alcoholism
History of shock treatments
Group Behavior Questionnaire; individual scores on:
1. Time one should take when speaking to group.
2. Degree to which one should speak directly to the topic under discussion.
3. Degree to which one should respond to behavior in the group as "good" or "bad."
4. Extent to which one should propose action not in accord with previous decisions of the group.
5. In a group decision, extent to which one should talk about his own and other members' feelings and perceptions.
6. Extent to which one should participate verbally or emotionally in the actions of the group.
7. Extent to which one should talk to the group about interpersonal relationships in the group or with group process.
8. Extent to which one should point to particular members and evaluate their behavior both inside and outside the group.
9. Extent to which one should interrupt the person speaking when he wants to speak.

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[1]Technically, Work, Residence and Hospital History are demographic variables. However, these data were collected during and after Lodge tenure (not from the Fort Logan Admission Form). Also, in the various analyses, they were included with Lodge-observed variables. Therefore, they were grouped in this forth class of variables.

APPENDIX II

THE INSTRUMENTS

A. The Instruments and the Variables They Measure

B. Copies of the Instruments Used in this Study

APPENDIX II A.

INSTRUMENTS AND THE VARIABLES THEY MEASURE

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definition
1. AMRS	Achievement Motivation Rating Scale--motivation to achieve or avoid failure. The AMRS was administered 5 times at 2 month intervals. It was operationally defined as the total AMRS ÷ the total possible score.[1]
2. BMMA	Business Manager's Monthly Assessment--degree of adjustment to Lodge work. The BMMA is a rating scale required by the Colorado Division of Vocational Rehabilitation. The Business Manager completed a BMMA each on all current Lodge members. It was defined as the total BMMA score ÷ total possible score.
3. CIS-E CIS-N	Community Interview Schedule--a simple form designed to ascertain interviewee's (employers and neighbors) general feelings about the Lodge members. Administered once at end of the study. Defined as the total score across interviewees for each of the two CIS forms.
4. GBQ	Group Behavior Questionnaire (Jackson, 1967)--group norms related to meetings. The GBQ produces scores for each S on 12 norms, briefly described as follows: a. Time one should take when speaking to the group. (TIME) b. Extent one should stay on the topic before the group (TOPIC) c. Extent one should evaluate another member in the meeting as good or bad. (GOOD-BAD) d. Extent one should propose action conflicting with a previous group decision. (ACTION vs. DECISIONS) e. In a group decision, extent one should rely on opinions of others. (OPINIONS) f. In a group decision, extent one should bring up personal feelings and perceptions. (FEELINGS) g. Extent one should participate verbally or emotionally in the group's actions. (PARTICIPATION) h. When the group is having difficulty solving a problem, extent one should spend time collecting information or analyzing, rather than working directly on the problem. (ANALYZING) i. When one contributes an idea, extent he should be concerned about others' opinion of him. (OTHERS) j. Extent one should bring up interpersonal relations and group process. (PROCESS)

[1]"Total possible score" refers to the highest score possible on the instrument under discussion.

APPENDIX II A.

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definition
4. GBQ	k. Extent one should point out members and evaluate their behavior inside or outside the group. (POINTING) 1. When one wants to speak, extent he should interrupt present speaker. (INTERRUPT) Administered twice during the study in February, 1970 and June, 1970. Defined as (on each of the 12 norms) the S's score minus the mean group score ("distance from mean").
5. GLBS	General Lodge Behavior Scale--degree of self-sufficiency of dependency demonstrated by the S. The GLBS is a rating scale done by having each Lodge member rate 5 other members. Each member's 5 subjects were assigned to him at random. Administered 4 times: December, 1969, March, 1970, June, 1970, and September, 1970. Defined as the mean score across raters -- the total possible score.
6. GR	Group Report--effectiveness of Lodge meetings. The GR is a rating scale which the investigator completed at the end of each observed meeting. Administered 3 times a week. Defined as the mean of total scores each month -- the total possible score.
7. IPPS	Individual Participation Pattern Schedule--participation in meetings (IPPS-Personal), Job Problems (Work-Situational), General Problems (Problems-Situational) and Crises (Situational). The IPPS was used to observe 2 morning and the Friday afternoon meetings. IPPS was defined as number of times S addressed another member per 100 minutes of meeting time during meetings he attended. Work was defined as $(A-R)/M$, where A equals number of man-hours of jobs accepted, R equals number of man-hours of jobs rejected and M equals number of IPPSes administered during the month. Problems were defined as $(RI+S)/M$, where R equals the rank of the problem (1. Domestic, 2. Missing small personal items, 3. Drinking, 4. Misuse of medication, 5. Relations with neighbors, 6. Lack of work), I equals the intensity of problem (from 1-low to 5-high), and S equals the number of problems settled. Crises were defined as $(JI+KI+S)/M$, where J equals number of crises, I equals intensity (5 point scale), K equals number of crises where more than one person is involved, and H equals intensity of such crises.
8. IR-PA IR-IA IR-WA IR	Individual Report--Personal Adjustment (general behavior and appearance), Interpersonal Adjustment (behavior toward other individuals and in groups), Work Adjustment (behavior in work situations) and Overall Adjustment (appearance and behavior in all three categories).

APPENDIX II A.

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definition
8. IR	The IR is a rating scale arranged in 3 parts completed bi-monthly by an investigator on each current Lodge member. Administered 5 times at 2 month intervals. Defined as the IR-PA subtotal score, the IR-IA subtotal and the IR-WA subtotal. The IR was defined as the total IR score across all parts ÷ total possible score.
9. LARS	Lodge Activity Rating Scale--amount of scoial activity during leisure time. The LARS is a rating scale with 12 categories. An investigator entered the Lodge and observed the behavior of every member--at the instant he saw the member--and rated the behavior according to one of the LARS categories. The entire process required from 5 to 15 minutes. Administered 3 times a week, such that every leisure hour of every waking day was repeatedly observed. Defined as the monthly mean score across all observations during the month ÷ highest possible score.
10. LAQ	Lodge Affect Questionnaire--(1) degree to which the S likes the other members, (2) degree to which the Lodge members like the S. The LAQ is a 4 point scale on which the S stated the degree to which he liked each other member. Although constructed as a questionnaire the LAQ was administered as an interview schedule in this research. Administered 7 time at bi-monthly intervals to current Lodge members. Defined as (LAQ-1) total score ÷ total possible score. Defined as (LAQ-2) total ratings by others ÷ total possible score.
11. LAIS	Lodge Attitude Interview Schedule--attitudes toward the Lodge. The LAIS was designed to elicit responses about the S's thinking and feelings about the Lodge concept, the work, the men, the premises and changes that should be made. Administered once during the data collection period of 13 months to current members, former members and those who were referred but failed to join. New members were generally interviewed within one to two weeks of their entry date. A follow-up was done on all referrals (PLIS, discussed below), who could be reached during the period, December, 1970 to March, 1971. The LAIS was designed to yield subtotal scores that defined the following variables; the S's: Situation when he first heard about the Lodge. Knowledge about the Lodge prior to entering or visiting. Attitudes toward the Lodge prior to entering or visiting. Expectations prior to entering or visiting. Attitudes after he became a member. Report as to his participation in Lodge meetings. Current attitudes toward the Lodge.

APPENDIX II A.

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definition
11. LAIS	Opinion as to benefits of the Lodge for him. Suggestions as to changes needed in the Lodge. Overall attitudes and thoughts toward the Lodge. Defined as S's total score ÷ total possible score.
12. LCQ	Lodge Communication Questionnaire--(1) extent to which the S talked to other members, (2) degree to which other members talked to the S. The LCQ is a 4 point scale on which the S stated how much he had talked with each other member during the past 24 hours. The questionnaire was used as an interview schedule in this study. Administered every 5th day. Defined as (LCQ-1) the monthly mean total LCQ score across all administrations during the month ÷ total possible score. Defined as (LCQ-2) the monthly mean total score of ratings by others ÷ total possible score.
13. MIQ	Minnesota Importance Questionnaire--personal needs on the job. The MIQ was used as an interview schedule in this study, to score the following categories of personal needs on the job: a. Working conditions. b. Compensation. c. Security. d. Variety. e. Authority of the individual. f. Utilization of abilities. g. Social status. h. Fairness of company policies and practices in dealing with individual employees. i. Supervision and human relations in regard to the individual employee. j. Activity--keeping busy. k. Moral values--no serious conflict between personal convictions and the type of business the company does. l. Degree of responsibility--extent to which individual employee may make decisions. m. Recognition for adequate or outstanding work performance. n. Achievement--degree to which employee may feel a sense of achievement in the work he does. o. Advancement. p. Supervision--technical competence of supervisors. q. Social service--rendered by the work of the company and its employees. r. Creativity--opportunity to do creative work. s. Independence--ability to perform work tasks with minimal or no supervisions. Administered 4 times at 3 month intervals. Definition on each of the 20 variables was a subscore for each need yielded by the MIQ.

APPENDIX II A.

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definition
13. MIQ	Definition--overall work needs--total MIQ score ÷ total possible score.
14. PARS	Personal Abilities Rating Scale--aptitude for functioning in the community. The PARS is a 7 point scale on which an investigator registered his opinions about the S's abilities. Administered 5 times at bi-monthly intervals. Defined as the total PARS score ÷ total possible score.
15. PHIS	Personal History Interview Schedule--a form for recording data upon which 24 predictor variables were based. Each variable is listed below with its operational definition. The data were collected from the S, himself, with necessary prompting by the interviewer. Administered twice: (1) when LAIS was completed and (2) when PLIS was administered. The 24 variables were labelled and defined in the following manner: Hospital history since age 18--Fort Logan. Number of months on Fort Logan rolls ÷ total number of months since age 18 to date the instrument was administered (months since 18). Hospital history since age 18--other than Fort Logan. Months on rolls of hospitals other than Fort Logan ÷ months since 18. Hospital--treatment for alcoholism. Number of months treated for alcoholism ÷ months since 18. Hospital--shock treatment. Defined as a score: "1" for no shock treatment; "2" for one or more shock treatments. Residential history since age 18. Type of residence was ranked according to degree of healthfulness as: (1) parents (least healthful), (2) alone in a room or apartment, (3) alone in a boarding house, (4) with a roommate, (5) own nuclear family (most healthful). The score for each of the 5 variables (ranks) was computed by multiplying the rank by the number of months S resided in that type of residential situation; the produce was then divided by months since 18. A 6th score, Overall index of residence history was computed by summing across the 5 possible scores described above. Work history since age 18. Types of work were weighted (United States Statistical Abstract, 1969) as: (1) unskilled labor (1.8) semi-skilled labor, (1.9) sales and (2.2) skilled labor. The score for each of the 4 variables was computed as weight multiplied by months since 18. A 5th variable, Overall index, was obtained by summing across the 4 possible indices. Work history during the two years prior to entering the Lodge was calculated in the same way as Work history since age 18, except that the products were not divided by any number.

APPENDIX II A.

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definition
16. PLIS	Post-Lodge Interview Schedule--current attitudes about the Lodge, the S's own progress, and present satisfaction with his residence and work situation. Administered once at the end of the study to all referrals who could be located. (Post-Lodge was a slight misnomer vis a vis members who were current on December 31, 1970. They, too, were interviewed with appropriate adjustment in questions.) Defined as total PLIS score ÷ number of items (number of items differed on PLIS form used with referrals who had failed to join the Lodge.
17. PMA	Percent of Meetings Attended--computed from the IPPS. Administered 3 times a week. Defined as the number of minutes spent in Lodge meetings per month ÷ the total number of minutes for meetings held during the month--or for the portion of the month the S was a member.
18. SIS	Social Impact Scale--a 5 point rating scale on which an investigator registered how the S affected him socially. Administered 8 times generally at bi-monthly intervals. Defined as S total score on the SIS ÷ the total possible score.
19. SQLP	Staff Questionnaire on the Lodge Program--an instrument containing 13 items designed to yield 3 subtotals (Knowledge of--Behavior toward--and Attitudes toward--the Lodge) and a total score combining all 3 influences regarding the Lodge. The SQLP contained 17 scores counting items subtotals and the total score. Each of the 17 scores was used as a separate predictor variable. It was administered once during the study, in August, 1970, to 224 staff members on the Adult Psychiatric, Alcoholism and Crises Teams at Fort Logan. The variables were defined in the following manner: Items 1, 2, 3 and 6 were ratio scores obtained by dividing the response to the question by an empirically derived answer obtained from Fort Logan and Lodge records. Items 4, 5, 9, 10 and 11 were the actual scores on the scales that appeared in the SQLP. Items 7, 8, 12 and 13 were scored as either "1" (gave no "criteria," "reasons," "ways beneficial," or "ways harmful") or "2" (gave one or more "criteria," "reasons," "ways beneficial" or "ways harmful") Item 14 (Knowledge of Lodge, a subtotal score) was computed by summing the scores across items 1 to 4. Item 15 (Behavior toward the Lodge, a subtotal score) was obtained by summing across items 5 to 8. Item 16 (Attitudes toward the Lodge, a subtotal score) was calculated by summing across items 9 to 13.

APPENDIX II A.

Instrument Symbol	Instruments, Variables Frequency of Administration and Operational Definitions
19. SQLP	Item 17, the total SQLP score, was computed by summing across items 1 to 13.
20. WAQ	Work Attitudes Questionnaire--a 14 item true-false scale used as an interview schedule in the present study. Administered 8 times generally at bi-monthly intervals. Defined as the total score ÷ total possible score.

In addition to the operational definitions described above, Change Scores were computed for the AMRS, BMMA, GLBS, IPPS, IR, LAQ-1, LAQ-2, LARS, LCQ-1, LCQ-2 and MIQ. These scores were labelled and defined as follows:

Beginning. The second monthly (or periodic) score the S earned after he joined the Lodge less his first monthly (or periodic) score.

Mid. Depending on the number of monthly scores the S earned during his stay in the Lodge, his Mid Change Score was computed as the mean of certain of his middle scores less the mean of his first plus his second score.

Number of Scores	4	5 or 6	7 or 8	9 or 10	11 or 12	13
Mean of Middle Scores	3	3+4	4+5	4+5+6	5+6+7	6+7+8

Post-Mid. These change scores were computed by subtracting certain middle scores from the mean of the S's last two monthly scores

Number of Scores	4	5	6 or 7	8 or 9	10	11	12	13
Mean of Middle Scores	2+3	2+3	3+4	3+4+5	4+5+6	5+6+7	6+7+8	5+6+7+8

Extremes. The mean of certain last scores less the mean of certain first scores.

Number of Scores	4	5	6	7	8	9	10	11	12	13
Last Scores	4	4+5	5+6	6+7	7+8	8+9	9+10	9+10+11	10+11+12	11+12+13
First Scores	1+2	1+2	1+2	1+2	1+2	1+2+3	1+2+3	1+2+3	1+2+3	1+2+3

APPENDIX II B.

COPIES OF THE INSTRUMENTS

ACHIEVEMENT MOTIVATION RATING SCALE (AMRS)

INSTRUCTIONS: Please rate this member on all of the areas shown below. Circle the number of the item you think describes best what this member would do under the circumstances indicated. Comparisons with "people" refer to the general U.S. Population. Comparisons with "members" refer to other Lodge members. Do not write in spaces on the left side of the page.

__ __ __ __ __ __ FLMHC NO. NAME_____
1 6

__ __ __ __ __ __ DATE_____
7 12

__ __ __ __ __ __ RATER: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner
13 18 5. Franks 6. Ross 7. Potter

__ 19 He would work hardest on a task:
1. If he were almost certain to succeed.
2. If he had only a 50-50 chance to succeed or fail.
3. If he had a small chance for success but the odds were great that he would fail.

__ 20 He would more likely:
1. "Play it safe" by sticking to tasks he knew he could handle.
2. Take a chance and try to do something even though he knew he might fail.

__ 21 He takes the lead in attempting the most difficult tasks on the group's jobs:
1. Less than most other members.
2. About the same as the others do.
3. More than most other members.

__ 22 He works:
1. Less than most other members.
2. About like the other members do.
3. Harder than most other members.

__ 23 Which of the following three ways would he choose for accomplishing a certain job?
1. Produce barely acceptable results but take virtually no risk of failure.
2. Produce merely satisfactory results but take less risk than #3.
3. Produce really good results but risk failure unless circumstances were just right.

__ 24 He would choose a job with an hourly pay of:
1. $1.25 but with a small (20%) chance of failure.
2. $3.00 but with only a 50-50 chance of failure.
3. $7.50 but with a 75% chance of losing the job because he could not do it.

__ 25 He would "play it safe" by staying well within tasks he knew he could do:
1. More than most people would do.
2. About the same as most people.
3. Less than most people.

___ 26 He would avoid challenges with their uncertain outcomes and consequent danger of failure:
1. More than most people.
2. About average--like most people.
3. Less than most people.

___ 27 He would really put himself into what he did and would take failure hard:
1. More than most people do.
2. About the way most people do.
3. Less than most people do.

___ 28 He would tackle tasks that were pretty obviously beyond him:
1. Less than most people would.
2. About like most people would.
3. More than most people would.

___ 29 He worries about being a failure:
1. More than most people do.
2. About the same as most people.
3. Less than most people do.

___ ___ 30 31 TOTAL SCORE

0 1 79 80 INSTRUMENT NUMBER

10 - CDR - 2
Form - 16 - 7/68

COLORADO DEPARTMENT OF SOCIAL SERVICES
DIVISION OF REHABILITATION
(BUSINESS MANAGER'S MONTHLY ASSESSMENT)
TRAINING PROGRESS REPORT

NOTE: This report must accompany any claims for payment of tuition or other charges.

Name of Trainee_____ Month ending_____ 19____

1. Number of days present (For full-time trainee)_____days.
   Number of hours instruction (For part-time or tutorial)_____hours.
   Check with "X" word or words best describing Items 2, 3, 4, 5, and 6.

2. Regularity of Attendance-This Month:
   Time Lost_____
   Occasional Absences_____
   Irregular_____
   Were Absences excusable? Yes__ No__

3. Status of Trainee-This Report:
   In Training_____
   In Training but ready for job_____
   In Employment_____
   Discontinued_____

4. Progress this month:
   Accelerated_____
   Average_____
   Slow_____
   No Progress_____

5. Quality of work:
   Excellent_____
   Good_____
   Fair_____
   Poor_____

6. Cooperation in Training:
   Cooperative_____
   Fairly Cooperative_____
   Indifferent_____
   Not Cooperative_____

7. Difficulties (If any check below and explain briefly on back of this form):
   a) With Training Course:
      Learning subject matter_____
      Following instructions_____
      Handling tools or machines_____
      Speed_____
      Accuracy_____
   (b) Other difficulties:
      With disability_____
      With appliances_____
      With general health_____
      With other (describe)_____

8. Subject or operations this month--with grades (If in employment training, rate performance as Good, Fair or Poor):

Subjects or Operations	Grade or Rating	Subject or Operations	Grade or Rating

9. In your judgment, does trainee have the talent, personality, educational and other qualifications necessary to succeed in this kind of work?_____
   If not, explain_____

10. Has trainee begun to earn a wage?_____ If so, how much?_____

11. How much more time will trainee require (approx.) to complete training?_____

12. Recommendations for improving performance_____

(Place)_____ Training Agency_____

(Date)_____ (Address)_____

(Signed)_____
Officer or Instructor in Charge

COMMUNITY INTERVIEW SCHEDULE--EMPLOYERS (CIS-E)

INSTRUCTIONS: The purpose of this interview is to obtain some attitudes and opinions about the Lodge as a whole and/or certain members. Interviewees will be employers for whom the Lodge members have worked. All responses will be strictly confidential. Only the summary results will be available for inspection. Please answer every question.

___ ___ ___ ___ ___ ___ (1–6) RESPONDENT'S NO. (Cols. 1 & 2) NAME_____

___ ___ ___ ___ ___ ___ (7–12) DATE_____

___ ___ ___ ___ ___ ___ (13–18) INTERVIEWER: 1. Gregory 7. Potter 8._____ 9._____

Sometime ago (about _____) you had some work done by men from Labor Saver Service. As a representative of Labor Savers, I am trying to determine how our clients feel about the work performed by the men.

___ ___ (19–20) When one or more of the men from Labor Saver Service worked for you did you find the work to be: 1. Poor 2. Fair 3. Good 4. Excellent

___ ___ (21–22) Did you consider the general behavior of the men to be: 1. Poor 2. Fair 3. Good 4. Excellent

___ ___ (23–24) Did you feel that the price you paid for the work was fair and competitive? 1. No 2. Yes

___ ___ (25–26) Do you plan to hire Labor Saver Service again for similar kinds of work? 1. No 2. Yes

___ ___ (27–28) Is there anything else you would like to say regarding the men who operate the Labor Saver Service?

_____

_____

_____

_____

___ ___ ___ (76–78) TOTAL SCORE

4 1 (79–80) INSTRUMENT NUMBER

COMMUNITY INTERVIEW SCHEDULE--NEIGHBORS (CIS-N)

INSTRUCTIONS: The purpose of this interview is to obtain some attitudes and opinions about the Lodge as a whole and/ or certain members. Interviewees will be immediate neighbors. All responses will be strictly confidential. Only the summary results will be available for inspection. Please answer every question.

___ ___ ___ ___ ___ ___ RESPONDENT'S NO. (Cols. 1 & 2) NAME_____
1 6

___ ___ ___ ___ ___ ___ DATE_____
7 12

___ ___ ___ ___ ___ ___ INTERVIEWER: 1. Gregory 7. Potter 8._____ 9._____
13 18

As you probably know, the men next door operate a janitorial business known as Labor Saver Service. As a representative of the group, I am attempting to find out how various people in the neighborhood feel about the organization.

___ ___ Are you acquainted with any of the Labor Saver Service men? 1. No 2. Yes
19 20

___ ___ What do you think of them as neighbors? 1. Unfavorable 2. Neutral
21 22 3. Favorable

___ ___ Is there anything else you would like to say regarding the men who operate the
23 24 Labor Saver Service?

_____

_____

_____

_____

___ ___ ___ TOTAL SCORE
76 78

4 2 INSTRUMENT NUMBER
79 80

GENERAL LODGE BEHAVIOR SCALE (GLBS)

Please rate the man named below on the following areas of behavior. Circle the description you think best fits the member. Your ratings are for research purposes only and will be kept strictly confidential.

1 — — — — — 6 FLMHC NO. NAME _____

7 — — — — — 12 DATE _____

13 — — — — — 18 RATER _____

	Behavior	Description 1.	2.	3.	4.	5.
19	He is a leader in our meetings.	Never	Rarely	Occasionally	Often	Very Often
20	He is very helpful to the leader of our meetings.	Never	Rarely	Occasionally	Often	Very Often
21	He is a leader in our free time activities and discussions.	Never	Rarely	Occasionally	Often	Very Often
22	He questions or challenges the rules and regulations of the Lodge.	Never	Rarely	Occasionally	Often	Very Often
23	He socializes with people other than those in the Lodge.	Never	Rarely	Occasionally	Often	Very Often
24	He leaves the Lodge to go to movies, sports, dances and other entertainment.	Never	Rarely	Occasionally	Often	Very Often
25	He goes shopping alone.	Never	Rarely	Occasionally	Often	Very Often
26	He goes on dates.	Never	Rarely	Occasionally	Often	Very Often
27	He shows initiative at work and does not always need to be told what to do next.	Never	Rarely	Occasionally	Often	Very Often
28	He talks with non-Lodge people while working, such as employers, the men who run the dump, etc.	Never	Rarely	Occasionally	Often	Very Often
29	He is able to work by himself.	Never	Rarely	Occasionally	Often	Very Often
30	He is concerned about money matters, such as fines, how much work, deductions from his pay.	Never	Rarely	Occasionally	Often	Very Often

31 — 32 TOTAL SCORE

0 5 INSTRUMENT NUMBER

GROUP BEHAVIOR QUESTIONNAIRE*

Each of us participates in many groups in our day-to-day activities. We are members of families, clubs, teams, classes, committees, and various other groups. The purpose of this questionnaire is to find out how you react to members of the groups you belong to, when they behave in one way or another.

Instructions

In answering the items in this questionnaire, think of a typical group member. Do not think of an actual person or an actual group, but an "average member". In every item that follows, for each of the alternative behaviors, a through f, ask yourself: "If he (she) behaved in that way, how would I feel?" Use the Approval-Disapproval Scale (on separate sheet) to represent your feelings. Just circle a number on the scale opposite each alternative behavior, a through f, indicating how much you would approve or disapprove a member of a group you were in if he (she) behaved in that way. Work rapidly and use your first reaction without thinking it over too long.

Specimen Question

The following is a specimen item, as it might appear after being filled out by someone. Note that you might have answered it similarly or differently. Each person answers in terms of how they would feel themselves. Obviously, there are no "right" or "wrong" answers. We simply wish to find out how much you would approve or disapprove a group member if he (she) behaved in various ways.

0. He (she) disagrees with the previous speaker in the group

a.	more than 90% of the time	9 8 7 6 5 4 3 **(2)** 1
b.	about 80% of the time	9 8 7 6 5 4 3 **(2)** 1
c.	about 60% of the time	9 8 7 6 5 **(4)** 3 2 1
d.	about 40% of the time	9 8 7 6 **(5)** 4 3 2 1
e.	about 20% of the time	9 **(8)** 7 6 5 4 3 2 1
f.	less than 10% of the time	9 8 7 6 5 **(4)** 3 2 1

(NOW PLEASE TURN THE PAGE AND CIRCLE A NUMBER OPPOSITE EVERY ALTERNATIVE IN EACH OF THE FOLLOWING ITEMS.)

*Copyright February, 1967 by Jay Jackson.

1. When he speaks in the group, he usually takes

a. 15 to 20 seconds	9	8	7	6	5	4	3	2	1
b. 30 seconds to 1 minute	9	8	7	6	5	4	3	2	1
c. 1 to 2 minutes	9	8	7	6	5	4	3	2	1
d. 2 to 3 minutes	9	8	7	6	5	4	3	2	1
e. 3 to 5 minutes	9	8	7	6	5	4	3	2	1
f. more than 5 minutes	9	8	7	6	5	4	3	2	1

2. His remarks in the group are concerned directly with the topic under discussion

a. more than 90% of the time	9	8	7	6	5	4	3	2	1
b. about 80% of the time	9	8	7	6	5	4	3	2	1
c. about 60% of the time	9	8	7	6	5	4	3	2	1
d. about 40% of the time	9	8	7	6	5	4	3	2	1
e. about 20% of the time	9	8	7	6	5	4	3	2	1
f. less than 10% of the time	9	8	7	6	5	4	3	2	1

3. He reacts to behavior in the group as either "good" or "bad"

a. less than 10 of the time	9	8	7	6	5	4	3	2	1
b. about 20% of the time	9	8	7	6	5	4	3	2	1
c. about 40% of the time	9	8	7	6	5	4	3	2	1
d. about 60% of the time	9	8	7	6	5	4	3	2	1
e. about 80% of the time	9	8	7	6	5	4	3	2	1
f. more than 90% of the time	9	8	7	6	5	4	3	2	1

4. He proposes action that is not in accord with previous decisions of the group

a. more than 90% of the time	9	8	7	6	5	4	3	2	1
b. about 80% of the time	9	8	7	6	5	4	3	2	1
c. about 60% of the time	9	8	7	6	5	4	3	2	1
d. about 40% of the time	9	8	7	6	5	4	3	2	1
e. about 20% of the time	9	8	7	6	5	4	3	2	1
f. less than 10% of the time	9	8	7	6	5	4	3	2	1

5. When the group is making a decision, he relies upon the opinions of other members.

a. less than 10% of the time	9	8	7	6	5	4	3	2	1
b. about 20% of the time	9	8	7	6	5	4	3	2	1
c. about 40% of the time	9	8	7	6	5	4	3	2	1
d. about 60% of the time	9	8	7	6	5	4	3	2	1
e. about 80% of the time	9	8	7	6	5	4	3	2	1
f. more than 90% of the time	9	8	7	6	5	4	3	2	1

6. In the midst of a group discussion, he talks about his own and other members' feelings and perceptions

a.	more than 90% of the time	9	8	7	6	5	4	3	2	1
b.	about 80% of the time	9	8	7	6	5	4	3	2	1
c.	about 60% of the time	9	8	7	6	5	4	3	2	1
d.	about 40% of the time	9	8	7	6	5	4	3	2	1
e.	about 20% of the time	9	8	7	6	5	4	3	2	1
f.	less than 10% of the time	9	8	7	6	5	4	3	2	1

7. He participates in the actions of the group, either verbally or emotionally

a.	less than 10% of the time	9	8	7	6	5	4	3	2	1
b.	about 20% of the time	9	8	7	6	5	4	3	2	1
c.	about 40% of the time	9	8	7	6	5	4	3	2	1
d.	about 60% of the time	9	8	7	6	5	4	3	2	1
e.	about 80% of the time	9	8	7	6	5	4	3	2	1
f.	more than 90% of the time	9	8	7	6	5	4	3	2	1

8. When the group is having difficulty in solving a problem, he spends time collecting information about and analyzing the difficulty, rather than working on the problem itself

a.	more than 90% of the time	9	8	7	6	5	4	3	2	1
b.	about 80% of the time	9	8	7	6	5	4	3	2	1
c.	about 60% of the time	9	8	7	6	5	4	3	2	1
d.	about 40% of the time	9	8	7	6	5	4	3	2	1
e.	about 20% of the time	9	8	7	6	5	4	3	2	1
f.	less than 10% of the time	9	8	7	6	5	4	3	2	1

9. When he contributes an idea to the group discussion, he is concerned about what other members will think of him or how they will see him

a.	less than 10% of the time	9	8	7	6	5	4	3	2	1
b.	about 20% of the time	9	8	7	6	5	4	3	2	1
c.	about 40% of the time	9	8	7	6	5	4	3	2	1
d.	about 60% of the time	9	8	7	6	5	4	3	2	1
e.	about 80% of the time	9	8	7	6	5	4	3	2	1
f.	more than 90% of the time	9	8	7	6	5	4	3	2	1

10. His remarks in the group are concerned with interpersonal relationships in the group, or with group processes

a.	more than 90% of the time	9	8	7	6	5	4	3	2	1
b.	about 80% of the time	9	8	7	6	5	4	3	2	1
c.	about 60% of the time	9	8	7	6	5	4	3	2	1
d.	about 40% of the time	9	8	7	6	5	4	3	2	1
e.	about 20% of the time	9	8	7	6	5	4	3	2	1
f.	less than 10% of the time	9	8	7	6	5	4	3	2	1

11. He points to particular members of the group and evaluates their behavior both inside and outside of the group

a.	less than 10% of the time	9	8	7	6	5	4	3	2	1
b.	about 20% of the time	9	8	7	6	5	4	3	2	1
c.	about 40% of the time	9	8	7	6	5	4	3	2	1
d.	about 60% of the time	9	8	7	6	5	4	3	2	1
e.	about 80% of the time	9	8	7	6	5	4	3	2	1
f.	more than 90% of the time	9	8	7	6	5	4	3	2	1

12. When he wants to speak, he interrupts the person speaking

a.	more than 90% of the time	9	8	7	6	5	4	3	2	1
b.	about 80% of the time	9	8	7	6	5	4	3	2	1
c.	about 60% of the time	9	8	7	6	5	4	3	2	1
d.	about 40% of the time	9	8	7	6	5	4	3	2	1
e.	about 20% of the time	9	8	7	6	5	4	3	2	1
f.	less than 10% of the time	9	8	7	6	5	4	3	2	1

GROUP REPORT (GR)

INSTRUCTIONS: 1. In observing the Lodge meeting for this report, please keep uppermost in your thinking that you are observing the moods and behaviors of the entire group--not just a few of the more verbally expressive members. 2. Try to fit your reporting into the alternatives shown. If this is impossible in an occasional instance, write a brief description of the behavior itself. 3. BE SURE to record the time you commence--and end--your observation of the meeting. 4. Circle the alternative that best describes the group's behavior. 5. Do not fill in the coding spaces on the left side of the form

1 O O O O O O 6

7 _ _ _ _ _ _ 12 DATE_____

13 _ _ _ _ _ _ 18 OBSERVER: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner 5. Franks 6._____ 7._____ 8._____ 9._____

19 _ _ 21 TIME MEETING OBSERVED (MINUTES) Time Began_____ Time Stopped_____

22 23 Number of Members Present _____

24 Number of Members Absent Names_____

25 Business Manager 1. Present 0. Absent

26 Number of researchers present _____

27 Number of FLMHC staff members present _____

28 Number of guests present _____

29 Number of others present _____

30 Primary Content of the Meeting:

1. Personal problems 2. Family 3. Inter-member problems 4. Lodge work

31 Primary Mood of the Group:

1. Angry 2. Anxious 3. Concerned 4. Contented 5. Cheerful

32 Dependence upon Business Manager:

1. Very high 2. High 3. Low 4. Very low

GO ON TO NEXT PAGE

Meeting Date_____Time_____Observer_____GR--2

___ 33 Quality of Business Manager's Participation:

1. Demanding 2. Confronting 3. Supporting 4. Advising 5. Reporting

___ 34 Quantity of Business Manager's Participation:

1. Very active 2. Moderately active 3. Minimally active 4. Inactive

___ 35 Goal Directiveness:

1. No goal 2. Some goal specific 3. High goal specific

___ 36 Group Effectiveness--Extent of Participation:

1. Inactive 2. Minimally active 3. Moderately active 4. Active

___ 37 Group Development Demonstrated By:

1. Interaction 2. Common acceptance 3. Identification 4. Cohesiveness

___ 38 Group Focal Conflict was at the Motive Stage of:

1. Disturbing 2. Reactive 3. 1 & 2 4. 2 & 7 5. 1 & 7 6. 1, 2 & 7
7. Solution

___ 39 Group Work was disturbed by the Presence or Behavior of:

1. Guests 2. Staff 3. Researchers 4. Business Manager 5. A member
6. Not disturbed

___ ___ 40 41 TOTAL GROUP SCORE

2 4 79 80 INSTRUMENT NUMBER

INDIVIDUAL PARTICIPATION PATTERN SCHEDULE (IPPS)

INSTRUCTIONS: When one member speaks to another, place the speaker's number in the column marked "Speaker" and the number of the person addressed in the column titled "Member Address." On the lines entitled "Comments about the Meeting" record the subjects discussed, what the disposition of the issue was (settled or allowed languish), and the intensity of the discussion.

Speaker	Member Addressed	Comments about the Meeting

INDIVIDUAL REPORT (IR)

INSTRUCTIONS: Please rate this member on all of the areas shown below. This is to be done by checking a position from 1 to 7 for each item. Use the U.S. POPULATION as your reference for positioning NOT OTHER LODGE MEMBERS. (Take into account the socio-economic status of the member.)

___ (1–6) FLMHC No. Name_____

___ (7–12) Date_____

___ (13–18) Rater: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner 5. Franks 6._____ 7. _____ 8. _____ 9. _____ 10. _____

PERSONAL ADJUSTMENT

___ (19)	Cleanliness (Person and Clothing)	Low	1 2 3 4 5 6 7	High
___ (20)	Dress	Unattractive	1 2 3 4 5 6 7	Attractive
___ (21)	Use of Free Time	Inappropriate	1 2 3 4 5 6 7	Appropriate
___ (22)	General Anxiety Level	Tense	1 2 3 4 5 6 7	Relaxed
___ (23)	Thought Processes	Preoccupied	1 2 3 4 5 6 7	Flexible
___ (24)	Inappropriate Dependency Behavior	Much	1 2 3 4 5 6 7	None
___ (25)	Emotion	Inappropriate	1 2 3 4 5 6 7	Appropriate
___ (26)	Inappropriate Hostility	High	1 2 3 4 5 6 7	Low

___ ___ (27–28) TOTAL SCORE--PERSONAL ADJUSTMENT

INTERPERSONAL ADJUSTMENT

___ (29)	Initiates Informal Conversation	Rarely	1 2 3 4 5 6 7	Often
___ (30)	Amount of Informal Interaction	None	1 2 3 4 5 6 7	Much
___ (31)	Informal Interactions	Inappropriate	1 2 3 4 5 6 7	Appropriate

GO ON TO NEXT PAGE

Member_____ Date_____ IR--2

32 Meetings--Participation--Amount — Low 1 2 3 4 5 6 7 High

33 Meetings--Participation--Quality — Inappropriate 1 2 3 4 5 6 7 Appropriate

34 Clarity of Communication — Low 1 2 3 4 5 6 7 High

35 Conformity to Group Norms — Low 1 2 3 4 5 6 7 High

36 37 TOTAL SCORE--INTERPERSONAL ADJUSTMENT

WORK ADJUSTMENT

38 Quality of Work — Unacceptable 1 2 3 4 5 6 7 Acceptable

39 Quantity of Work — Low 1 2 3 4 5 6 7 High

40 On-the-Job Initiative — Low 1 2 3 4 5 6 7 High

41 Work Motivation — Low 1 2 3 4 5 6 7 High

42 Work Punctuality — Low 1 2 3 4 5 6 7 High

43 Follows Directions — Rarely 1 2 3 4 5 6 7 Usually

44 45 TOTAL SCORE--WORK ADJUSTMENT

46 47 48 TOTAL SCORE--ADJUSTMENT: PERSONAL, INTERPERSONAL, AND WORK

79 80 INSTRUMENT NUMBER

LODGE ACTIVITY RATING SCALE--GUIDE (LARSG)

INSTRUCTIONS:

1. The purpose of the LARS is to sample many brief cross-sections of the Lodge members' leisure time activities.

2. Please rate the activity each member is engaged in when you start your observation. Do this by placing the activity into one of the categories shown below--the one that best dercribes the activity you observe.

3. Designate the category by placing the proper symbol in the column headed "Activity Rating."

4. Proceed as rapidly as possible until you have--by your own observation, not on advice of someone else--accounted for the location and activity of each member.

5. Briefly state where the member was and what he was doing at the instant you observed him, (e.g., in living room watching TV with AG,CC, JS. Clear abbreviations are acceptable here.)

6. If a person appears in more than one area he is not rated after the first time.

7. If a person being rated shows more than one behavior during the period of observation he is given the score which is numerically highest of those behaviors.

Symbol	Category
1.	Out: In hospital for psychiatric reasons.
2.	Pathological Behavior: No other- or object-directed behavior with evidence of hallucinations, such as talking, laughing or gestures directed to a non-discernible stimulus.
3.	Sleep: Eyes closed and shows no response to any discernible stimulus for the entire period of observation.
4.	Null Behavior: Awake but showing no activity (e.g., sitting unoccupied, standing and showing no sign of interest in surroundings, pacing, etc.)
5.	Functional Non-social Behavior: Housecleaning, personal care, etc.
6.	Para-social Activities: Reading, writing, non-social games such as solitaire, functional object manipulation like tuning a radio, watching TV or listening to the radio, active observation of another member or group.
7.	Para-social Behaviors: Responding socially to an inanimate object (e.g., laughing at TV, swearing at a chair one has stumbled over, etc.)
8.	Out: Non social activity (e.g., walking, movies, hospital for medical reasons, etc.)
9.	Social Games: Any organized (identifiable rules for behavior) game carried on jointly by two or more persons.
10.	Two-person Group: Two persons engaged in any kind of social communication except an organized game.
11.	Three-person Group: Three or more persons engaged in any kind of social communication except an organized game
12.	Out: Engaging in social activity (e.g., going home, visiting friends, socializing in bars, etc.)

LODGE AFFECT QUESTIONNAIRE (LAQ)

INSTRUCTIONS: This questionnaire is designed to tell the Lodge research staff which Lodge members are very close friends. Listed below are the name of all the men in the Lodge. After each name are four statements. Please circle the one that best describes how close a friendship you have with that particular person.

1 — — — — — 6 FLMHC No. NAME _____

7 — — — — — 12 DATE _____

13 — — — — — 18 RESEARCHER: 1. Gregory 4. Gardner 5. Franks 7. Potter

		1	2	3	4
19	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
20	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
21	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
22	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
23	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
24	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
25	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
26	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
27	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much
28	_____	Don't Like Him	Just O.K.	Like Him	Like Very Much

77 78 TOTAL GROUP SCORE

79 80 INSTRUMENT NUMBER

LODGE ACTIVITY RATING SCALE (LARS)

INSTRUCTIONS: BE SURE to put "Activity Rating" in column indicated using the LARS Guide.

1 — — — — — 6

7 — — — — — 12 DATE _____

13 — — — — — 18 OBSERVER: 1. Gregory 4. Gardner 5. Franks 7. Potter

	Name of Member	Activity Rating	Comments (e.g., place and activity)
19			
20			
21			
22			
23			
24			
25			
26			
27			

51 — 53 TOTAL GROUP SCORE

54 TIME: 1. AM 2. PM

55 — — 58 TIME OF DAY

79 80 INSTRUMENT NUMBER

LODGE ATTITUDE INTERVIEW SCHEDULE--PRESENT AND FORMER MEMBERS (LAIS-PF)

INSTRUCTIONS: The central purpose of this schedule is to obtain information based on the subjects' own perceptions, opinions, criticisms and feelings.

1. To accomplish this objective--after asking a question--WAIT for the MAN'S OWN RESPONSE. If, after a reasonable length of time, little or no response occurs, then some probing is in order. For example, in Question 2, certain concrete things about the Lodge may be mentioned such as work, pay, the members themselves, the house, food, etc. However, avoid prompting by questions worded in a way to elicit a certain response.
2. Some noteworthy responses may not fit readily into one of the alternatives provided. In such cases please write in a brief description of the response.
3. The response category, NR, is an abbreviation for No Recall--Do Not Remember.
4. Circle the alternative that best describes the person's response.
5. BE SURE TO INDICATE A RESPONSE TO EACH AND EVERY ITEM.

1 — — — — — 6 FLMHC NO. NAME_____

7 — — — — — 12 DATE_____

13 — — — — — 18 INTERVIEWER: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner 5. Franks 6. Ross 7. Potter

19 How did you feel about the Lodge when you first heard about it? 1. NR 2. Negative 3. Neutral 4. Positive

20 What kinds of things did you hear about the Lodge this first time? 1. NR 2. Negative 3. Neutral 4. Positive

Judging by the things you first heard about the Lodge, how did you think you would feel about:

(This question relates to items 21-26 inclusive.)

21 The work program? 1. NR 2. Dislike 3. Indifferent 4. Like

22 The pay you would receive for your work? 1. NR 2. Dislike 3. Indifferent 4. Like

23 The men you would be working with? 1. NR 2. Dislike 3. Indifferent 4. Like

24 Living with the Lodge members? 1. NR 2. Dislike 3. Indifferent 4. Like

25 Living downtown away from the hospital? 1. NR 2. Dislike 3. Indifferent 4. Like

26 The help you might get from being in the Lodge? 1. NR 2. Probably wouldn't help me 3. Worth a try 4. Would help me

NAME_____DATE_____INTERVIEWER_____LAIS-PF--2

(INTERVIEWER NOTE: Keep in mind to wait a reasonable period for the man's own response. Where necessary, probe most carefully.)

___ What do you recall most vividly about your first visit to the Lodge? Primarily:
27 1. NR 2. Unfavorable 3. Indifferent 4. Favorable

When you left that first visit, how did you feel about:

(Items 28-35, inclusive, relate to this question)

___ The work that the men in the Lodge did? Primarily: 1. NR 2. Dislike 3. Indifferent
28 4. Like

___ How you would get along in the work program? Primarily: 1. NR 2. Very fearful
29 about it 3. Worried about it 4. Confident you could do it

___ The men, themselves? Primarily: 1. NR 2. Dislike 3. Indifferent 4. Like
30

___ The house? Primarily: 1. NR 2. Unfavorable 3. Indifferent 4. Favorable
31

___ The rooming arrangement? Primarily: 1. NR 2. Unfavorable 3. Indifferent
32 4. Favorable

___ Joining the Lodge? Primarily: 1. NR 2. Unfavorable 3. Indifferent 4. Favorable
33

___ Whether you would be accepted? 1. NR 2. Definitely unfavorable 3. Probably
34 unfavorable 4. About 50-50 chance 5. Thought the vote would be favorable

___ The men's attitude toward you? Primarily: 1. NR 2. Disliked 3. Indifferent
35 4. Liked

___ On the day you moved into the Lodge, what did you think it might do for you?
36 Primarily: 1. NR 2. Low 3. Moderate 4. High expectancy for help

___ How do (did) you like your room at the Lodge? 1. NR 2. Dislike 3. Indifferent
37 4. Like

___ What do (did) you think about the rules of the Lodge (e.g., no drinking on the pre-
38 mises, in by 10:30 pm week nights, signing out for overnight stays, fines for being late for--or missing--meetings)? 1. NR 2. Dislike 3. Indifferent 4. Like

___ How do (did) you feel about the meetings? 1. NR 2. Dislike 3. Indifferent
39 4. Like

___ How often do (did) you want to say something in the meetings? 1. NR 2. Never
40 3. Occasionally 4. Often 5. Very often

___ How often do (did) you say something in the meetings? 1. NR 2. Never 3. Occasionally
41 4. Often 5. Very often

NAME_____DATE_____INTERVIEWER_____LAIS-PF--3

(INTERVIEWER NOTE: Keep in mind to wait a reasonable period for the man's own response. Where necessary, probe most carefully.)

___ How do (did) you feel about the way the voting is (was) done in the meetings?
42 1. NR 2. Disapprove 3. Indifferent 4. Approve

___ Where do (did) you think important decisions are (were) made at the Lodge? 1. NR
43 2. Both private discussion and in the meetings 3. By private discussion outside the meetings 4. In the meetings

In regard to the work you have done while in the Lodge:

(Items 44-47, inclusive, relate to this question)

___ Do (did) you: 1. NR 2. Dislike it 3. Feel indifferent 4. Like
44

___ Do (did) you find it to be: 1. NR 2. Easy to learn 3. Somewhat hard to learn
45 4. Very hard to learn

___ Do (did) you find it to be: 1. NR 2. Easy to do as good a job as the others
46 3. Somewhat hard 4. Very hard

___ As to the quality of your work, do (did) you feel it is (was) generally: 1. NR
47 2. Poor 3. Fair 4. Good

___ Are (were) there any men in the Lodge you especially like(d) to work with? 1. NR
48 2. 0 3. 1 4. 2 5. 3 6. 4 7. 5 8. 6 or more

___ Are (were) there any men you especially dislike(d) working with? 1. NR 2. 6 or
49 more 3. 5 4. 4 5. 3 6. 2 7. 1 8. 0

___ Considering everything, what do you think of the Lodge now? 1. NR 2. Dislike
50 3. Indifferent 4. Like

___ Would you say that you: 1. NR 2. Believe the Lodge is harmful 3. Believe the
51 Lodge is not beneficial 4. You are not sure 5. Believe the Lodge is beneficial

___ ___ PERCENTAGE OF TOTAL SCORE
73 75

___ ___ TOTAL SCORE
76 78

1 0 INSTRUMENT NUMBER
79 80

LODGE COMMUNICATION QUESTIONNAIRE (LCQ)

INSTRUCTIONS: This questionnaire is designed to tell the Lodge research staff to whom various Lodge members talk. Listed below are the names of all of the men in the Lodge. After each name there are four statements. Please circle the one that reflects how much you have talked with that particular person during the past 24 hours.

1 — — — — — 6 FLMHC No. NAME_____

7 — — — — — 12 DATE_____

13 — — — — — 18 RESEARCHER: 1. Gregory 4. Gardner 5. Franks 7. Potter

		1	2	3	4
19	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
20	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
21	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
22	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
23	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
24	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
25	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
26	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
27	_____	None	Few Minutes	Less than ½ hour	More than ½ hour
28	_____	None	Few Minutes	Less than ½ hour	More than ½ hour

77 — 78 TOTAL GROUP SCORE

79 — 80 INSTRUMENT NUMBER

LODGE ATTITUDE INTERVIEW SCHEDULE--APPLICANTS WHO REFUSED OR WERE NOT APPROVED (LAIS--RR)

INSTRUCTIONS: The central purpose of this schedule is to obtain information based on the subject's own perceptions, opinions, criticisms and feelings.
1. To accomplish this objective--after asking a question--WAIT for the MAN'S OWN RESPONSE. If, after a reasonable length of time, little or no response occurs, then some probing is in order. For example, Question 2, certain concrete things about the Lodge may be mentioned such as work, pay, the members themselves, the house, food, etc. However, avoid prompting by questions worded in a way to elicit a certain response.
2. Some noteworthy responses may not fit readily into one of the alternative provided. In such cases please write a brief desceiption of the response.
3. The response category, NR, is an abbreviation for "No Recall--Do Not Remember".
4. Circle the alternative that best describes the person's response.
5. BE SURE TO INDICATE A RESPONSE TO EACH AND EVERY ITEM.

___ ___ ___ ___ ___ ___ FLMHC NO. NAME_____
1 6

___ ___ ___ ___ ___ ___ DATE_____
7 12

___ ___ ___ ___ ___ ___ INTERVIEWER: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner
13 18 5. Franks 6. Ross 7. Potter

___ How did you feel about the Lodge when you first heard about it? 1. NR 2. Negative
19 3. Neutral 4. Positive

___ What kinds of things did you hear about the Lodge this first time? 1. NR 2. Negative
20 3. Neutral 4. Positive

Judging by the things you first heard about the Lodge, how did you think you would feel about:

(This question relates to items 21-26 inclusive)

___ The work program? 1. NR 2. Dislike 3. Indifferent 4. Like
21

___ The pay you would receive for your work? 1. NR 2. Dislike 3. Indifferent 4. Like
22

___ The men you would be working with? 1. NR 2. Dislike 3. Indifferent 4. Like
23

___ Living with the Lodge members? 1. NR 2. Dislike 3. Indifferent 4. Like
24

___ Living downtown away from the hospital? 1. NR 2. Dislike 3. Indifferent 4. Like
25

___ The help you might get from being in the Lodge? 1. NR 2. Probably wouldn't help me
26 3. Worth a try 4. Would help me

___ What do you recall most vividly about your first visit to the Lodge? Primarily:
27 1. NR 2. Unfavorable 3. Indifferent 4. Favorable

NAME_____ DATE_____ INTERVIEWER_____ LAIS-RR--2

When you left that first visit, how did you feel about:

(Items 28-35, inclusive, relate to this question)

___ 28 The work that the men in the Lodge did? Primarily: 1. NR 2. Dislike 3. Indifferent 4. Like

___ 29 How you would get along in the work program? Primarily: L. NR 2. Very fearful about it 3. Worried about it 4. Confident you could do it

___ 30 The men, themselves? Primarily: 1. NR 2. Dislike 3. Indifferent 4. Like

___ 31 The house? Primarily: 1. NR 2. Unfavorable 3. Indifferent 4. Favorable

___ 32 The rooming arrangement? Primarily: 1. NR 2. Unfavorable 3. Indifferent 4. Favorable

___ 33 Joining the Lodge? Primarily: 1. NR 2. Unfavorable 3. Indifferent 4. Favorable

___ 34 Whether you would be accepted? 1. NR 2. Definitely unfavorable 3. Probably unfavorable 4. About 50-50 chance 5. Thought the vote would be favorable

___ 35 The men's attitude toward you? Primarily: 1. NR 2. Disliked 3. Indifferent 4. Liked

___ 36 Considering everything, what do you think of the Lodge now? 1. NR 2. Dislike 3. Indifferent 4. Like

___ 37 Would you say that you: 1. NR 2. Believe the Lodge is harmful 3. Believe the Lodge is not beneficial 4. You are not sure 5. Believe the Lodge is beneficial

___ ___ 73 75 PERCENTAGE OF TOTAL POSSIBLE SCORE

___ ___ 76 78 TOTAL SCORE

2 3 79 80 INSTRUMENT NUMBER

MINNESOTA IMPORTANCE QUESTIONNAIRE

This questionnaire may be obtained from Vocational Psychology Research, University of Minnesota, 447 B. A. Building, Minneapolis, Minnesota 55455.

PERSONAL ABILITIES RATING SCALE (PARS)

INSTRUCTIONS: This scale is to obtain your opinion about the person named below in regard to the characteristics mentioned in the items--however expert or inexpert that opinion may be. For items 19 and 20 circle the alternative that best describes the amount and type of interaction you have experienced with the subject. For items 21-28, check the space on the 1 to 7 scale that you think best describes the subject's ability on each item. Compare the subject with the GENERAL U.S. POPULATION not with other Lodge members. Complete each and every item. Do not write in the coding spaces on the left side of the form.

___ ___ ___ ___ ___ ___ FLMHC No. NAME _____
1 6

___ ___ ___ ___ ___ ___ DATE _____
7 12

___ ___ ___ ___ ___ ___ RATER: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner
13 18 5. Franks 6._____ 7._____ 8._____

___ Amount of rater's interaction with subject: 1. One hour 2. One to five hours
19 3. Over five hours

___ Type of interaction: 1. Formal, e.g., meetings 2. Personal discussion or
20 interview 3. Both 1 & 2

___ Intelligence — Low ___ ___ ___ ___ ___ ___ ___ High
21 1 2 3 4 5 6 7

___ Social skills — Socially inept ___ ___ ___ ___ ___ ___ ___ Socially adept
22 1 2 3 4 5 6 7

___ Ability to be punctual — Low ___ ___ ___ ___ ___ ___ ___ High
23 1 2 3 4 5 6 7

___ Conformance to rules and regulations — Low ___ ___ ___ ___ ___ ___ ___ High
24 1 2 3 4 5 6 7

___ Ability to work independently — Low ___ ___ ___ ___ ___ ___ ___ High
25 1 2 3 4 5 6 7

___ General stability — Low ___ ___ ___ ___ ___ ___ ___ High
26 1 2 3 4 5 6 7

___ Ability to learn mental skills — Low ___ ___ ___ ___ ___ ___ ___ High
27 1 2 3 4 5 6 7

___ Ability to learn physical skills — Low ___ ___ ___ ___ ___ ___ ___ High
28 1 2 3 4 5 6 7

___ ___ TOTAL SCORE FOR ITEMS 21-28
75 76

___ ___ GRAND SCORE FOR ITEMS 19-28
77 78

___ ___ INSTRUMENT NUMBER
79 80

PERSONAL HISTORY INTERVIEW SCHEDULE (PHIS)
Work--Residence--Hospital Tenure--Family

___ ___ ___ ___ ___ ___ FLMHC NO. NAME_____
1 6

___ ___ ___ ___ ___ ___ DATE_____
7 12

___ ___ ___ ___ ___ ___ INTERVIEWER: 1. Gregory 7. Potter
13 18

TABLE 1. HISTORY OF WORK AND RESIDENCE

Business/ Enterprise	Job Description*	From Mo/Yr	To Mo/Yr	#Mos. Worked	Hrs. Week	Pay Rate	Total Earned	Resided With Whom**

*Classify job descriptions as: 1. Labor 2. Semi-skilled 3. Skilled 4. Clerical 5. Sales 6. Supervisory 7. Entrepreneurial 8. Professional 9._____
**Classify residence types as: 1. Parents 2. Relatives 3. Foster parents 4. Foster home or Orphanage 6. Own nuclear family 7. Alone 8. Roommate 9. Boarding House

TABLE 2. HISTORY OF HOSPITAL TENURE

Institution	Location	From Mo/Yr	To Mo/Yr	No. Mos.	Modalities*	Treatment Types**

*Modalities of care: 1. 24 hour 2. Day 3. Out-patient 4. Family Care 5. Half-way House 6. Night
**Treatment types: 1. Custodial 2. Shock 3. Alcoholism 4. Group Therapy 5. Industrial Therapy 6. Recreational Therapy 7. Occupational Therapy

POST LODGE INTERVIEW SCHEDULE (PLIS-F)

INSTRUCTIONS: The purpose of this schedule is to obtain information regarding general progress, work, living arrangements and attitudes about the Lodge between the time he responded to the LAIS and the present time. Questions 25 and 26 are open-ended questions; be sure to allow time for the respondent's own opinions or remarks.

___ (1–6) FLMHC NO. NAME_____

___ (7–12) DATE_____

___ (13–18) INTERVIEWER: 1. Gregory 7. Potter 8._____ 9._____

___ (19) Considering everything, what do you think of the Lodge now? 1. Unfavorable 2. Neutral 3. Favorable

___ (20) As far as you personally are concerned, would you say that the Lodge was: 1. Harmful to you 2. Neither harmful nor beneficial 3. Beneficial to you

___ (21) In regard to your stay in the Lodge would you say that you: 1. Disliked it 2. Felt indifferent about it 3. Liked it

___ (22) Would you want to return to the Lodge? 1. No 2. Undecided 3. Yes

___ (23) In your opinion, how would you rate the Lodge compared to your present program and/or other programs you have experienced since you left the Lodge? 1. Present and/or other programs are (were) more helpful than the Lodge 2. The Lodge and others are about the same 3. The Lodge was more helpful

___ (24) For the Lodge members in general do you think the Lodge was: 1. Harmful 2. Neither harmful nor beneficial 3. Beneficial

___ (25) What were the reasons that you left the Lodge? _____

_____

_____

___ (26) What changes do you think should be made in the Lodge?_____

_____

_____

___ (27) Have you seen or talked with any of the present or former Lodge members since you left the Lodge? 1. No 2. Once 3. Several times

___ (28) How do you feel about your progress since leaving the Lodge? 1. Unsatisfied 2. Fairly satisfied 3. Satisfied

___ (29) Would you say that your are: 1. Not ready for any work at present 2. Ready for work in a Lodge-type situation 3. Ready for a job in the community

30 How do you feel about your present work situation? 1. Dislike 2. Indifferent 3. Like

31 How do you feel about your present residential situation? 1. Dislike 2. Indifferent 3. Like

76 78 TOTAL SCORE

79 1 80 7 INSTRUMENT NUMBER

POST LODGE INTERVIEW SCHEDULE (PLIS-RR)

INSTRUCTIONS: This schedule is to obtain information about the subject's general progress, work, living arrangements and attitudes about the Lodge between the time he responded to the LAIS and the present time.

___ ___ ___ ___ ___ ___ (1–6) FLMHC NO. NAME_____

___ ___ ___ ___ ___ ___ (7–12) DATE_____

___ ___ ___ ___ ___ ___ (13–18) INTERVIEWER: 1. Gregory 7. Potter 8._____ 9._____

___ (19) Considering everything, what do you think of the Lodge now? 1. Unfavorable 2. Neutral 3. Favorable

___ (20) If you could do so, would you want to join the Lodge now? 1. No 2. Undecided 3. Yes

___ (21) In your opinion, how would you rate the Lodge in comparison with your present situation or other programs you have experienced? 1. Present and/or other programs are more helpful than the Lodge 2. Lodge and others about the same 3. The Lodge is better than my present program and/or others

___ (22) What would you say were the reasons you were not voted into the Lodge? (You decided not to enter the Lodge?) _____

_____

_____

___ (23) For the Lodge members in general, do you think the Lodge was: 1. Harmful 2. Neither harmful nor beneficial 3. Beneficial

___ (24) What changes do you think should be made in the Lodge?_____

_____

_____

___ (25) Have you seen or talked with any of the present or former Lodge members since your visit to the Lodge? 1. No 2. Once 3. Several times

___ (26) How do you feel about your progress since your visit to the Lodge? 1. Unsatisfied 2. Fairly satisfied 3. Satisfied

___ (27) Would you say you are: 1. Not ready for any work at present 2. Ready for work in a Lodge-type situation 3. Ready for a job in the community

___ (28) How do you feel about your present work situation? 1. Dislike 2. Neutral 3. Like

___ (29) How do you feel about your present residential situation? 1. Dislike 2. Neutral 3. Like

___ ___ (76–78) TOTAL SCORE

1 (79) 8 (80) INSTRUMENT NUMBER

SOCIAL IMPACT SCALE (SIS)

INSTRUCTIONS: This scale is to assess the effect the person named below has ON YOU not necessarily on others, in whatever social interaction you have experienced with him. For Items 19 and 20 circle the alternative that best describes the amount and type of interaction you have had with the subject. For Items 21-26, check the space on the 1 to 5 scale that best describes how you feel about the subject at this time. Complete each and every item. Do not write in the coding spaces on the left of the form.

__ __ __ __ __ __ (1–6) FLMHC No. NAME_____

__ __ __ __ __ __ (7–12) DATE_____

__ __ __ __ __ __ (13–18) RATER: 1. Gregory 2. Bartley 3. E. Johnson 4. Gardner 5. Franks 6._____ 7._____ 8._____

__ (19) Amount of rater's interaction with subject: 1. Less than 10 minutes 2. Ten minutes to 1 hour 3. One to 5 hours 4. More than 5 hours

__ (20) Type of interaction: 1. Formal, e.g., meetings 2. Personal discussion 3. Both 1 & 2

__ (21)	General impression	Disagreeable	__ 1	__ 2	__ 3	__ 4	__ 5 Agreeable
__ (22)	Personal feeling	Dislike	__ 1	__ 2	__ 3	__ 4	__ 5 Like
__ (23)	Subject's social skills	Socially inept	__ 1	__ 2	__ 3	__ 4	__ 5 Socially adept
__ (24)	Subject appears to feel	Uncomfortable	__ 1	__ 2	__ 3	__ 4	__ 5 Comfortable
__ (25)	Subject's physical appearance	Unattractive	__ 1	__ 2	__ 3	__ 4	__ 5 Attractive
__ (26)	Total interaction	Unpleasant	__ 1	__ 2	__ 3	__ 4	__ 5 Pleasant

__ __ (75–76) TOTAL SCORE FOR ITEMS 21-26

__ __ (77–78) GRAND TOTAL SCORE FOR ITEMS 19-26

__ __ (79–80) INSTRUMENT NUMBER

STAFF QUESTIONNAIRE ON LODGE PROGRAM (SQLP)

PURPOSE: The objective of this questionnaire is to clarify how staff attitudes and information affect referral of patients to the Lodge. Hopefully, in the long run, the data gathered will help the Lodge members and staff to provide a better more beneficial facility for your patients. The Lodge research staff has attempted to make this questionnaire as brief as possible and yet yield valuable information. INSTRUCTIONS: (1) Please answer each and every question to the best of your personal knowledge of the Lodge program. Please feel free to add any comments that seem important to you. (2) Where appropriate, circle the number representing best your response or your situation. (3) Please do not write in the coding spaces in the left margin. Your responses will be held in the strictest confidence.

1 — — — — — 6 NAME_____

7 — — — — — 12 DATE_____

13 — — — — — 18 ADMINISTRATOR(S): 1. Gregory 7. Potter 8. Berberick 9. Porter and Vocational Counselors 9._____

19 20 TEAM: 1. D-1 2. D-2 3. D-3 4. D-4 5. D-5 6. D-6 7. Adams 8. Arapahoe 9. Jefferson 10. CORP 11. Alcoholism 12. Crises

21 22 POSITION: 1. Mental Health Worker 2. Nurse 3. Psychiatric Technician 4. Psychiatrist 5. Psychologist 6. Social Worker 7. Vocational Counselor 8. Ward Secreatry 9. Activity Therapist

1. 23 24 In your opinion, how many of the patients on your team during any given month are generally eligible to enter the Lodge?_____

2. 25 26 About how many of the patients on your team would you say have been eligible to enter the Lodge over the past year?_____

3. 27 28 How many vacancies--on the average--do you think generally exist in the Lodge?_____

4. 29 30 To what extent do you feel you are well enough acquainted--that is, to your own satisfaction--with the theory, practices and results of the Lodge program to discuss it with your patients? 1. Not well informed 2. Fairly well informed 3. Well enough informed

5. 31 32 Is it generally possible--considering your other duties--for you to recognize patients who might profit from being in the Lodge? 1. No 2. Yes

6. 33 34 During your tenure as a team staff member at Fort Logan, with about how many of your patients have you discussed the Lodge program to any extent at all? _____

NAME_____ DATE_____ SQLP--2

7. ___ ___ What criteria or guidelines do you employ in deciding which of your
35 36 patients may be eligible for entrance into the Lodge?

_____

_____

_____

8. ___ ___ What are the reasons that generally lead to your recommending that
37 38 a patient be referred to the Lodge? _____

_____

_____

9. ___ ___ At this point, how do you feel toward the Lodge as a means of rehabi-
39 40 litation for your "long-stay" patients? 1. Very unfavorable
2. Unfavorable 3. Indifferent 4. Favorable 5. Very favorable

10. ___ ___ Compared with your present attitude, how did you feel about the
41 42 Lodge six months to a year age? 1. Much more favorable then
2. Somewhat more favorable then 3. About the same 4. Somewhat
more favorable now 5. Much more favorable now

11. ___ ___ How would you compare the Lodge with other alternative rehabilita-
43 44 tion resources available at Fort Logan for the "long-stay" patient?
1. Worse than any other alternative 2. Not as good as most other
alternatives 3. About the same as other alternatives 4. Better
than most other alternatives 5. Better than any other alternative

12. ___ ___ In what ways do you think the Lodge may be beneficial to your
45 46 "long-stay" patients?_____

_____

_____

13. ___ ___ In what ways do you think the Lodge may be harmful to your patients?
47 48

_____

_____

_____

COMMENTS_____

_____

_____

_____

NAME_____ DATE _____ SQLP--3

14. ___ ___ ___ ___ Knowledge of the Lodge (Sum of items 23-24, 25-26, 27-28 29-30).
49 52

15. ___ ___ ___ ___ Behavior toward the Lodge (Sum of items 31-32, 33-34, 35-36 and 37-38).
53 56

16. ___ ___ ___ ___ Attitudes toward the Lodge (Sum of items 39-40, 41-42, 43-44 45-46 and 47-48).
57 60

17. ___ ___ ___ ___ Total Score (Sum of items 23-24 to 47-48 inclusive)
74 77

___ ___ ___ CARD NUMBER AND INSTRUMENT NUMBER
78 80

WORK ATTITUDE QUESTIONNAIRE (WAQ)

INSTRUCTIONS: Please read the following statements and indicate with an "X" whether each statement is TRUE or FALSE as applied to you. Be sure to mark all the statements. Do not write in the coding spaces on the left side of the form.

___ ___ ___ ___ ___ ___ FLMHC No. Name_____
1 6

___ ___ ___ ___ ___ ___ Date_____
7 12

___ ___ ___ ___ ___ ___ Researcher: 1. Gregory 2. Bartley 3. E. Johnson
13 18 4. Gardner 5. Franks 6. Ross 7._____ 8._____
9. _____ 10._____

___ 19 When I work, I am usually a very careful exacting worker. TRUE___ FALSE___

___ 20 I feel I am well adjusted to the Lodge work at the present time. TRUE___ FALSE___

___ 21 I feel I am well enough adjusted at the present time to work outside the Lodge program. TRUE___ FALSE___

___ 22 When I am upset, work usually makes me feel better. TRUE___ FALSE___

___ 23 If I suddenly inherited enough money to take care of all my needs for the remainder of my life, I probably would no longer be interested in working. TRUE___ FALSE___

___ 24 The people I work with often try to push off their work on to me. TRUE___ FALSE___

___ 25 I've found that people of the opposite sex make good bosses. TRUE___ FALSE___

___ 26 Working usually makes me feel nervous and tense. TRUE___ FALSE___

___ 27 It is necessary for me to support myself and at least one other person by going to work. TRUE___ FALSE___

___ 28 My relative (husband, wife, parent, etc.) is working and I do not need to work outside of the house. TRUE___ FALSE___

___ 29 I don't have to work to support myself because I am getting a pension, welfare, or other financial aid. TRUE___ FALSE___

___ 30 I only have to support myself. TRUE___ FALSE___

___ 31 I want to work, whether I have to support myself or not. TRUE___ FALSE___

GO ON TO NEXT PAGE

___ Bosses usually are interested only in getting as much work out of you as they can. TRUE___ FALSE___
32

___ ___ TOTAL SCORE LESS ITEM 21
75 76

___ ___ TOTAL SCORE--ALL ITEMS
77 78

___ ___ INSTRUMENT NUMBER
79 80

APPENDIX III

DATA OBTAINED FROM THE FORT LOGAN MENTAL HEALTH CENTER

RECORDS SYSTEM

A. Mental Status Data

B. Admission Data

APPENDIX III A.

MENTAL STATUS DATA

NOTE: The scores used in this study represent degrees of severity--or presence-absence--of the conditions listed below.

PERCEPTION

- Alertness
- Orientation
- Confusion
- Stupor
- Delirium
- Hallucinations"
  - Visual
  - Auditory
  - Tactile
  - Other
- Other Perceptual Deviations

INTELLECTION

A. Level, Range & Content

- Intelligence
- General Information
- Memory Disturbances:
  - Recent
  - Remote
  - Confabulation
  - Other Memory Disturbances
- Preoccupation
- Proverty of Thinking
- Impairment of Judgment Content:
  - Delusional
  - Phobic
  - Hypochondriacal
  - Obsessive
  - Depressive
  - Other

B. Functional Aspects

- Tempo
  - Blocking
  - Slowing
- Flight of Ideas
- Organization of Thought
- Abstraction Capacity
- Logic
- Autistic Thinking

C. Language

- Vocabulary Size
- Effectiveness of Communication

APPENDIX III A.

- Use
- Mutism
- Incoherence
- Circumstantiality

EMOTION

A. Quality
- Anxiety
- Fear
- Euphoria
- Elation
- Anger
- Depression
- Guilt
- Other

B. Stability

C. Appropriateness:
- Apathy
- Incongruity With Thought Content
- Ambivalence

ACTION (BEHAVIOR)
- General Appearance:
  - Cleanliness
  - Dress
  - Facial Expression & Gesturing
- General Attitude
- General Motor Activity
- Inappropriate Behavior

PEOPLE
- Social Patterns
  - Toward
  - Away
  - Against
- Areas of Conflict:
  - Dependence-Independence
  - Hostility
  - Sexuality

THINGS AND IDEAS

SELF
- Self-Ideal
- Body

PRESENT SITUATION
- Discomfort Experienced
- Discomfort Inflicted
- Impairment of Effectiveness
- Patient's Concept of Illness
- Patient's Attitude Toward Recovery
- Attitude Toward Examiner:
  - Cooperative

RELATION TO REALITY
- Prior Adjustment
- Disturbance
- Use of Defenses

APPENDIX III A.

Denial

Displacement

Introjection

Isolation

Projection

Reaction Formation

Regression

Repression

Sublimation

Undoing

PERSONALITY DISORGANIZATION

PRIMARY DIAGNOSIS

Severity

External Precipitating Stress

Predisposition

Impairment

SECONDARY DIAGNOSIS

Severity

LONG-RANGE PROGNOSIS

ANTICIPATED DEGREE OF IMPROVEMENT

Danger

Self

Others

RETURN TO COMMUNITY

To Assume Normal Responsibilities

To Assume Partial Responsibilities

For Custodial Care Only

APPENDIX III B.

ADMISSION DATA

NOTE: The scores used in this study represent degrees, number or presence-absence of the attributes listed below.

Cultural Group

Age

Citizen

Educationa of Patient

Marital Status

Times Married

Age of Spouse

Number of Children

Ordinal Place in Original Family

Veteran Status

Admission Diagnosis

Other Diagnosis

Social Class

Times Admitted

Occupation - Patient

Occupation - Spouse

Patient Income

Family Income

Number of Jobs Last Two Years

Now Employed

How Long on Present Job

How Long Unemployed

Type of Retirement

Type of Welfare

How Long at Present Residence

Father Living

Education of Father

Times Married - Father

Mother Living

Education of Mother

Times Married - Mother

Previous Psychiatric Care

Work History

Residence History

Hospitalization History

APPENDIX IV

GROUP BEHAVIOR QUESTIONNAIRE

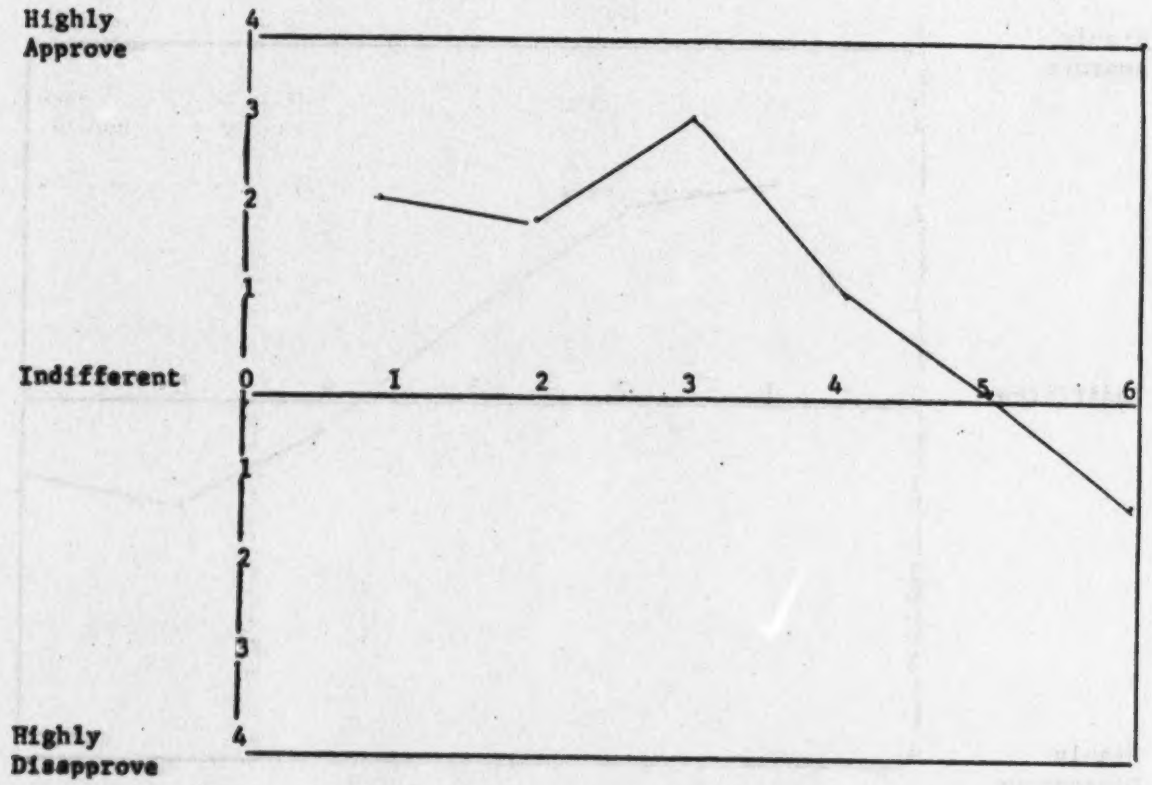
RETURN POTENTIAL CURVES

FEBRUARY, 1970 AND JUNE, 1970

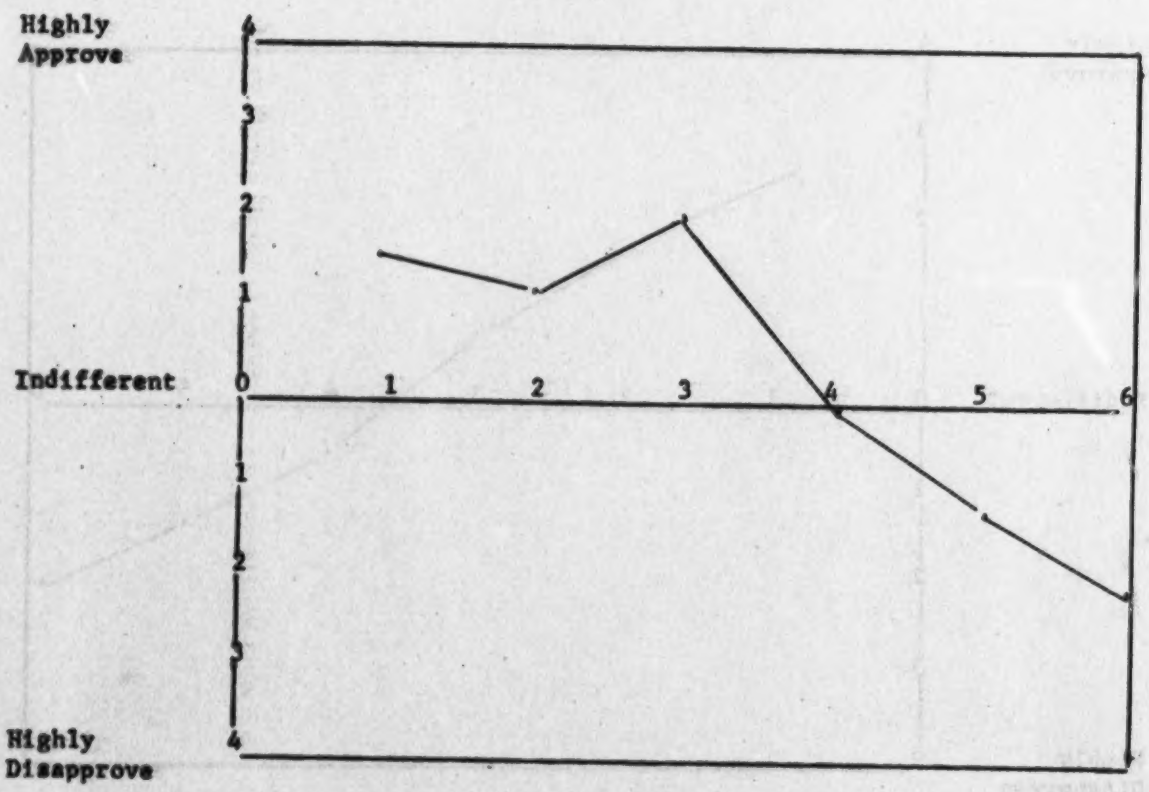
FIGURE 1

Norm 1: When he speaks in the group, he usually takes (short-long). (1 - low incidence of behavior, 6 - high incidence of behavior.)[1]

February, 1970



June, 1970

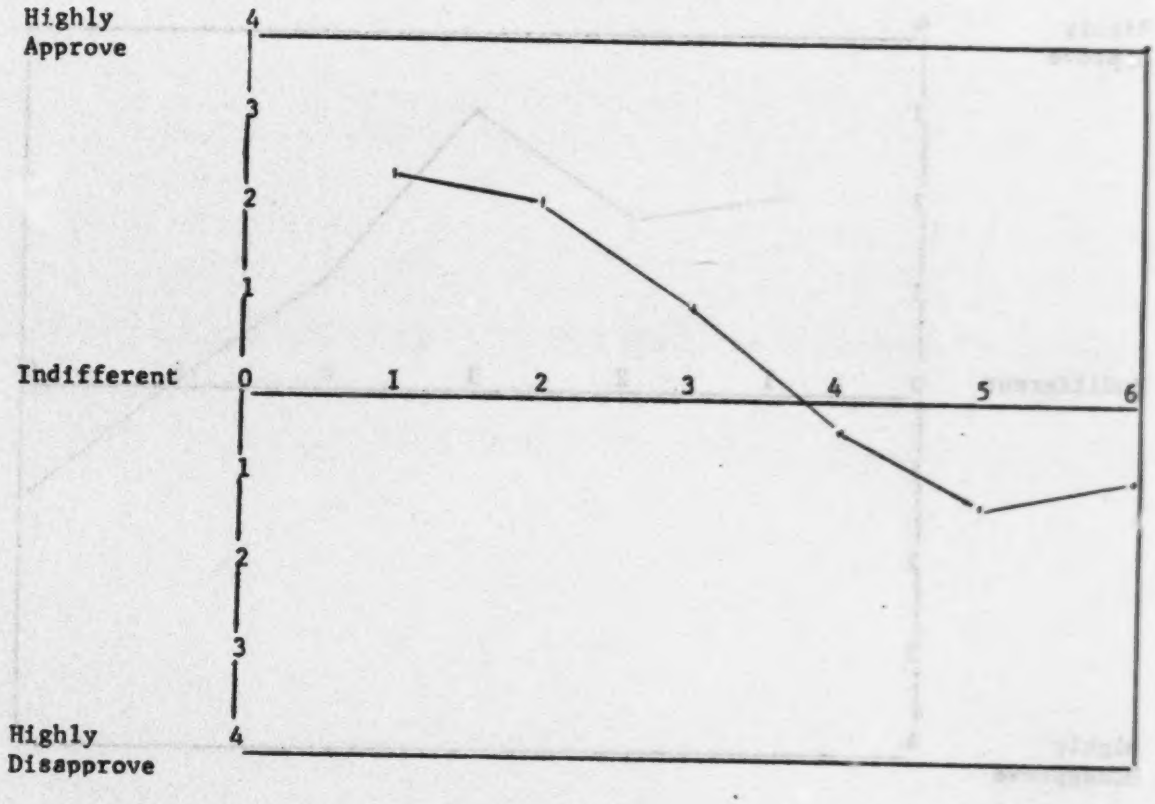


[1] See pages 38 through 40 for complete description of RPCs.

FIGURE 2

Norm 2: His remarks in the group are concerned directly with the topic under discussion. (1 - high incidence of behavior, 6 - low incidence of behavior.)

February, 1970



June, 1970

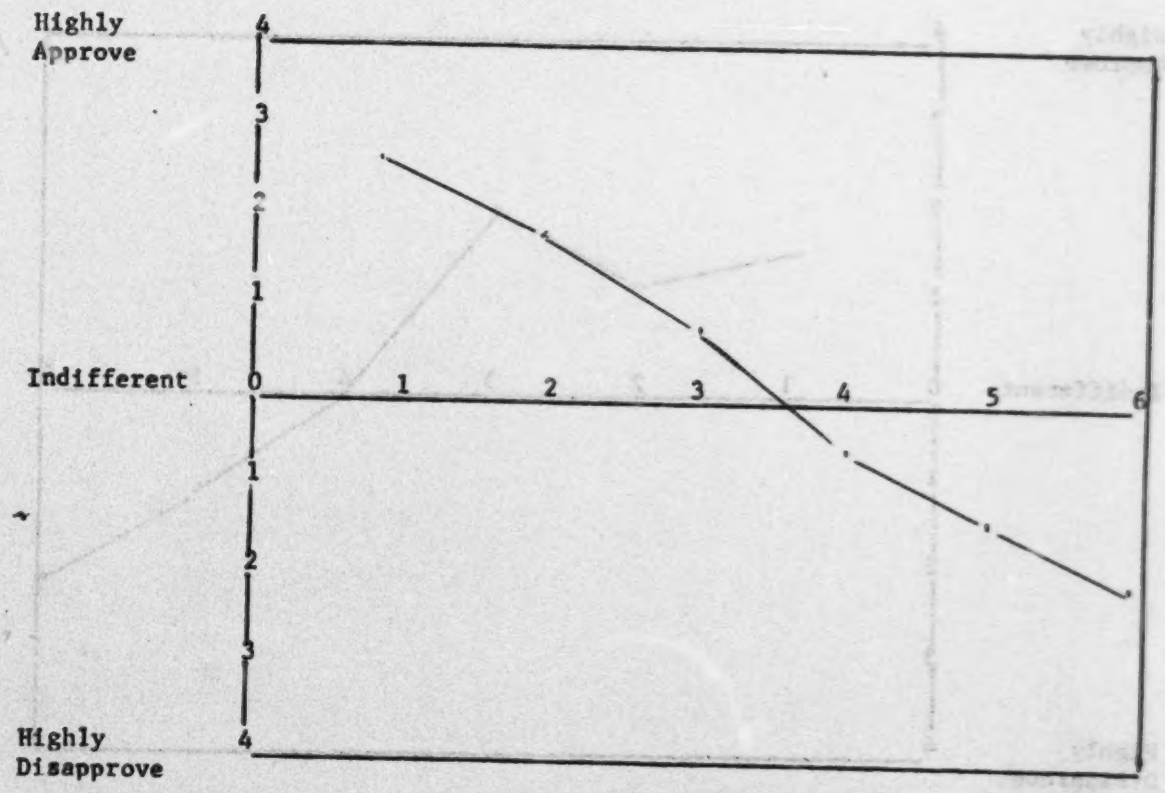
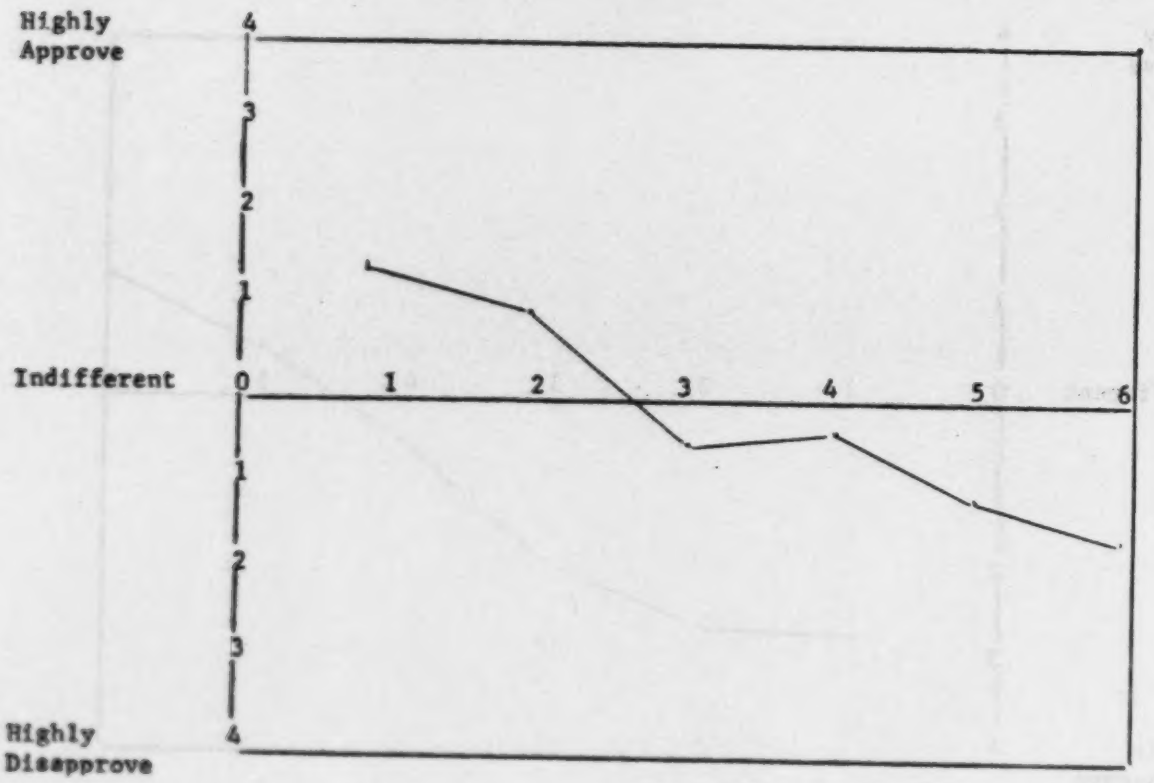


FIGURE 3

Norm 3: He reacts to behavior in the group as either "good" or "bad." (1 - low incidence of behavior, 6 - high incidence of behavior.)

February, 1970



June, 1970

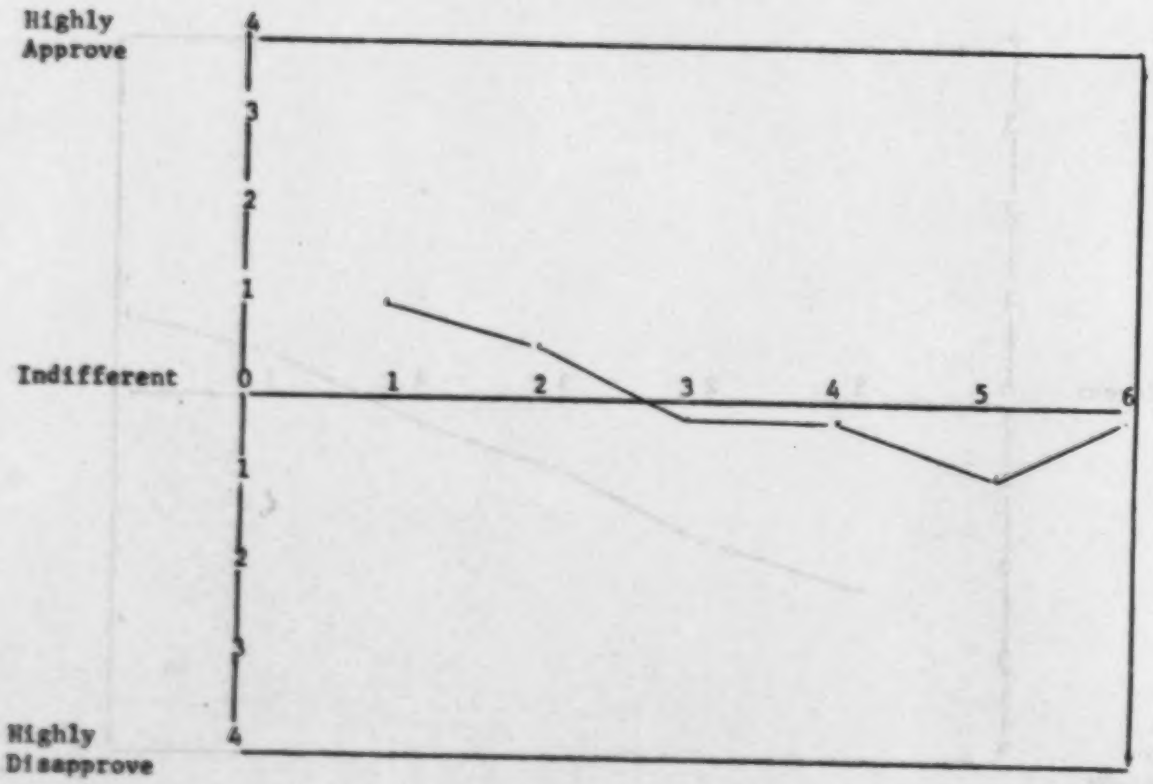
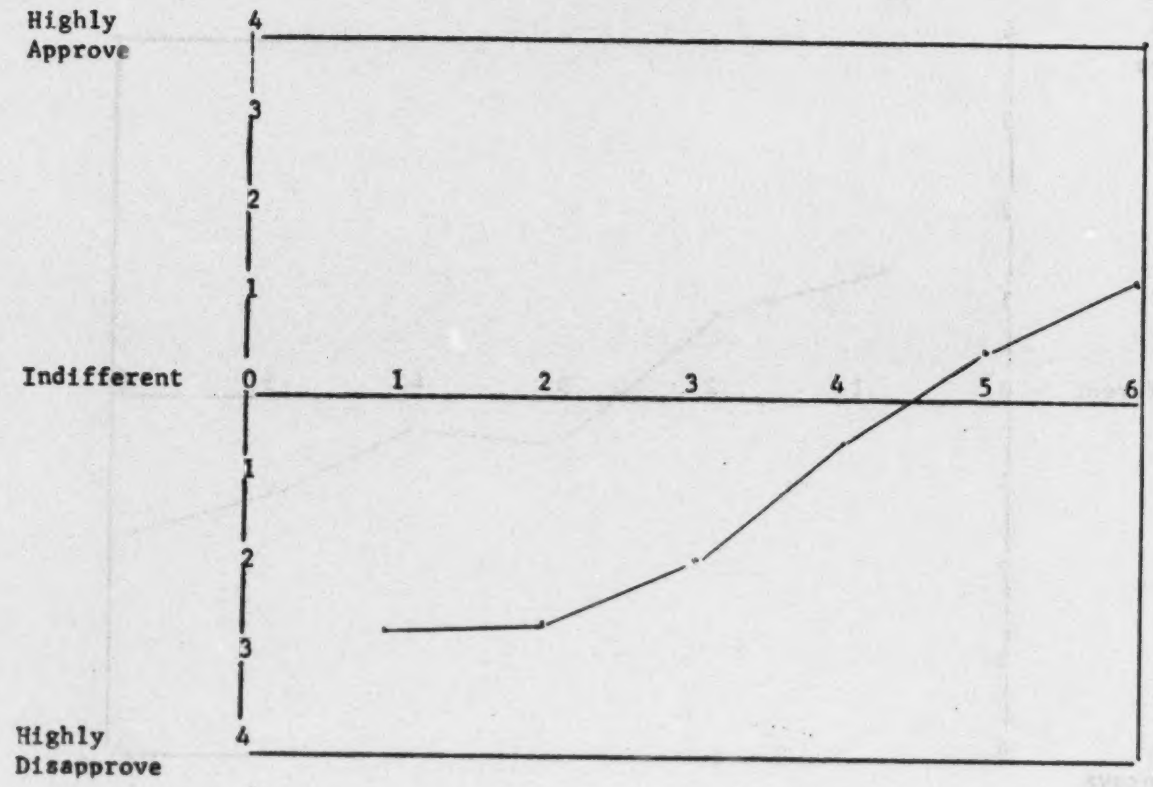


FIGURE 4

Norm 4: He proposes action that is not in accord with previous decisions of of the group. (1 - high incidence of behavior, 6 - low incidence of behavior.)

February, 1970



June, 1970

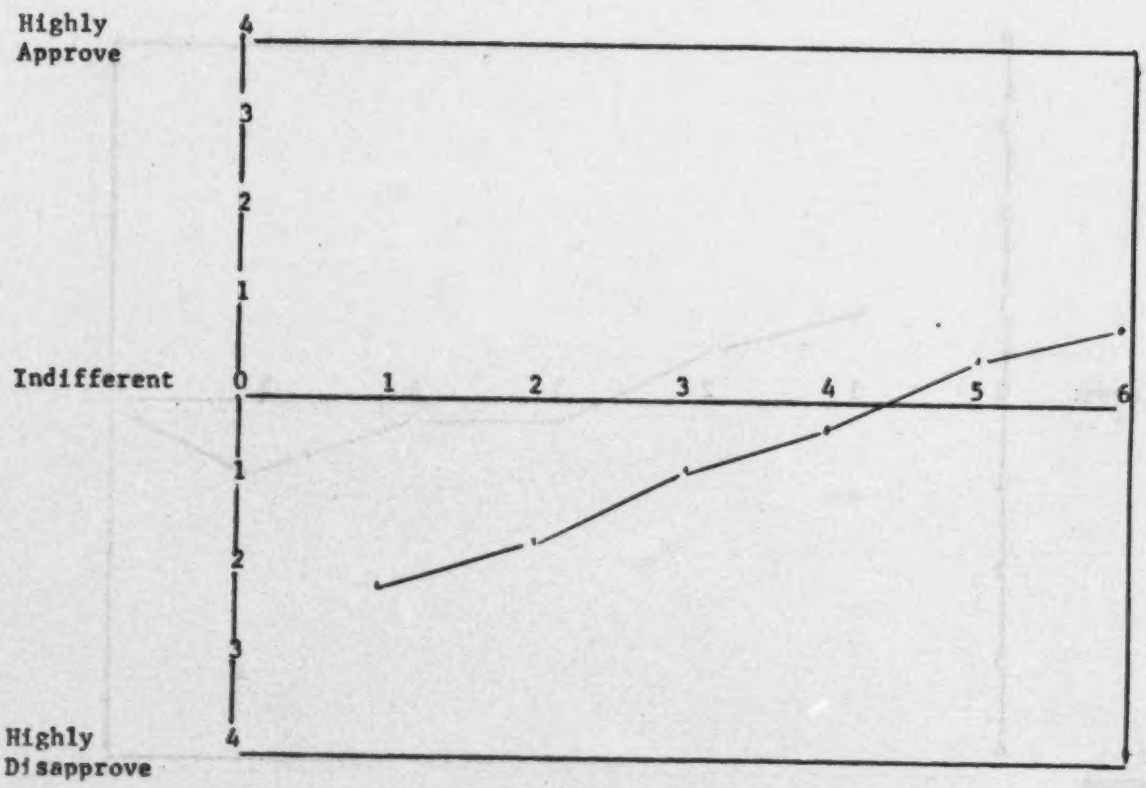
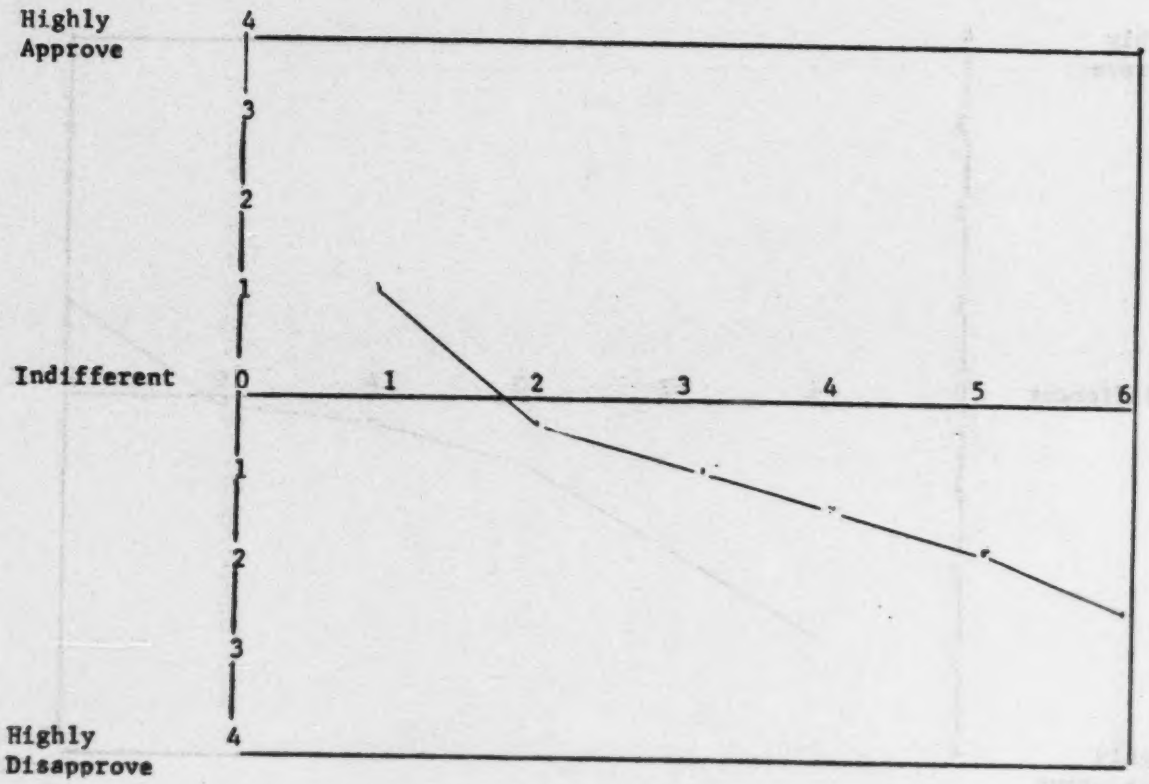


FIGURE 5

Norm 5: When the group is making a decision, he relies upon the opinions of other members. (1 - low incidence of behavior, 6 - high incidence of behavior.)

February, 1970



June, 1970

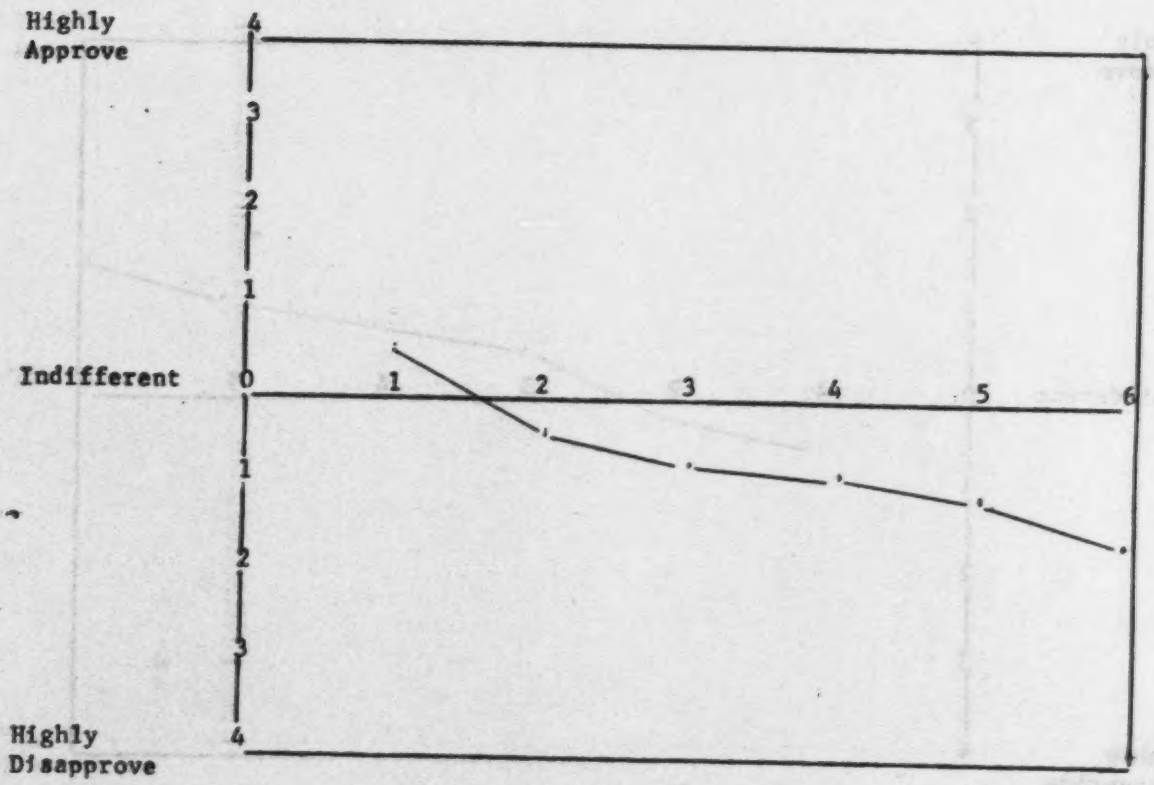
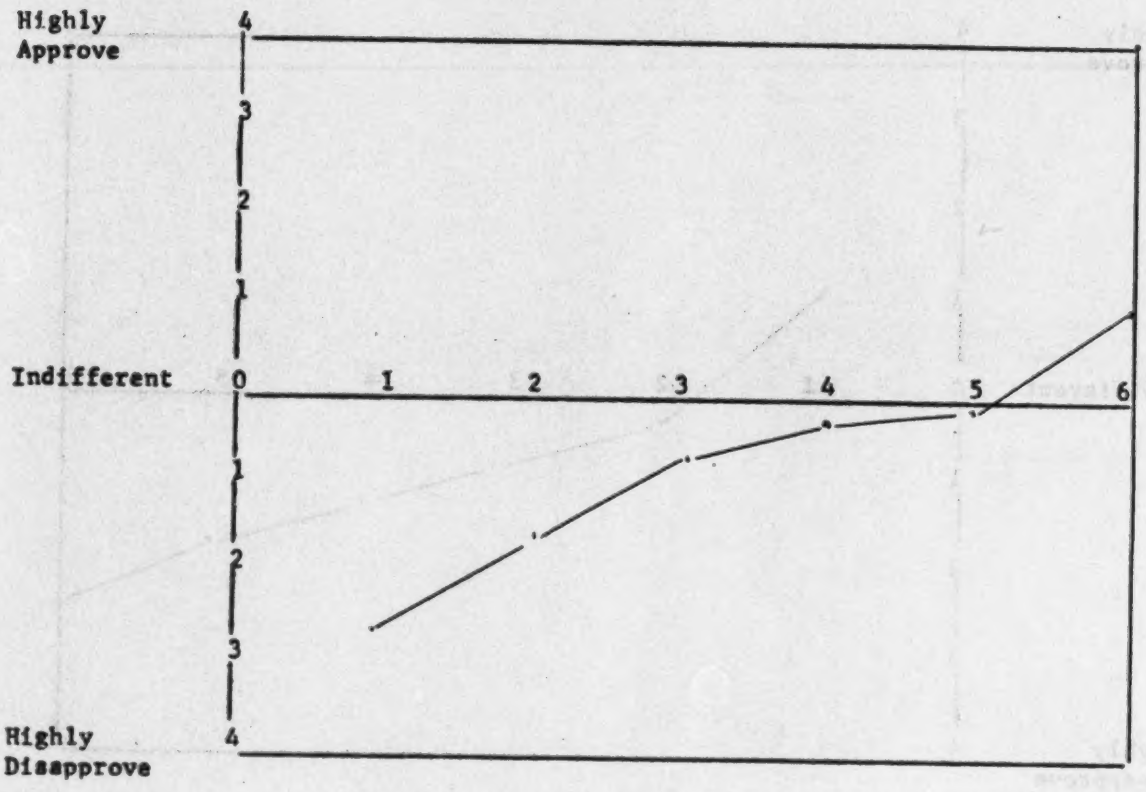


FIGURE 6

Norm 6: In the midst of a group discussion, he talks about his own and other members' feelings and perceptions. (1 - high incidence of behavior, 6 - low incidence of behavior.)

February, 1970



June, 1970

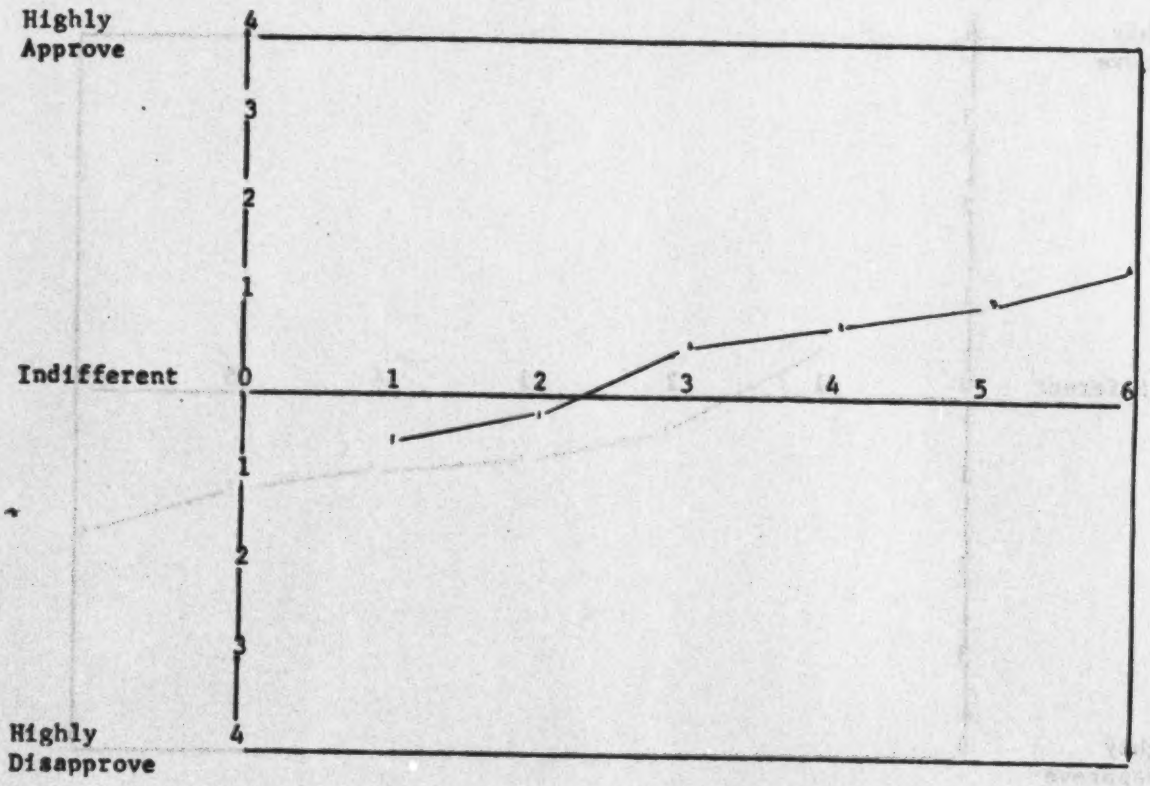
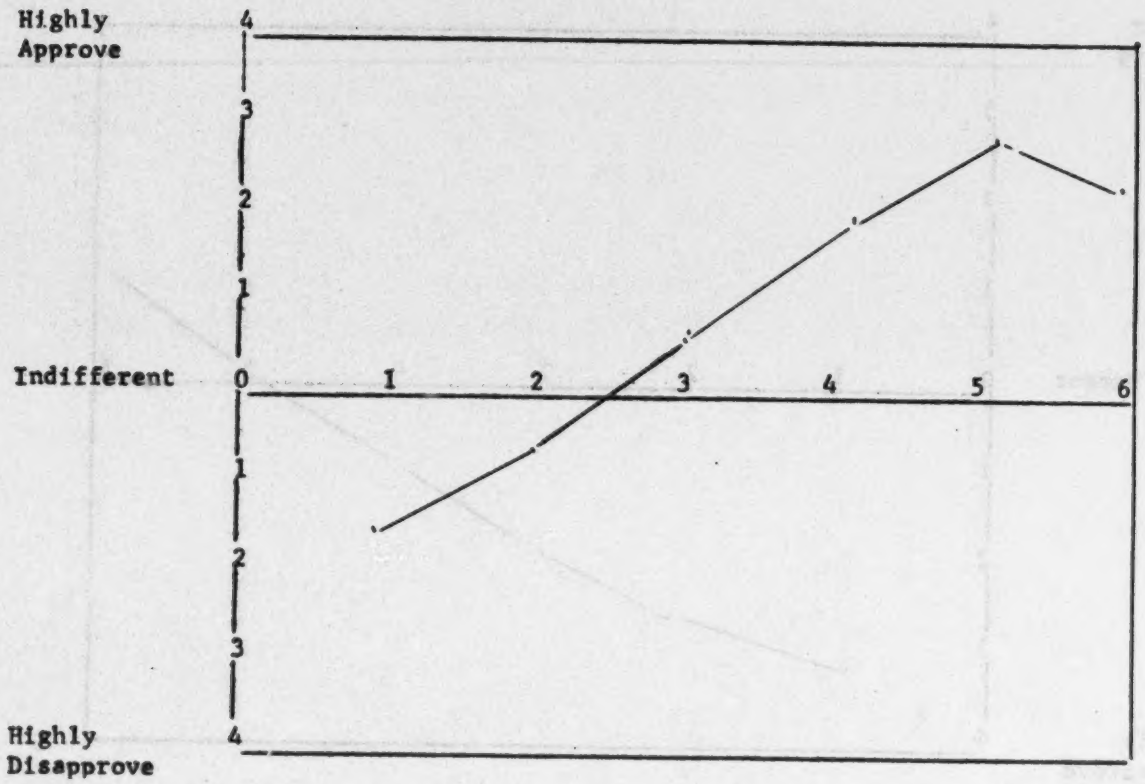


FIGURE 7

Norm 7: He participates in the actions of the group, either verbally or emotionally. (1 - low incidence of behavior, 6 - high incidence of behavior.)

February, 1970



June, 1970

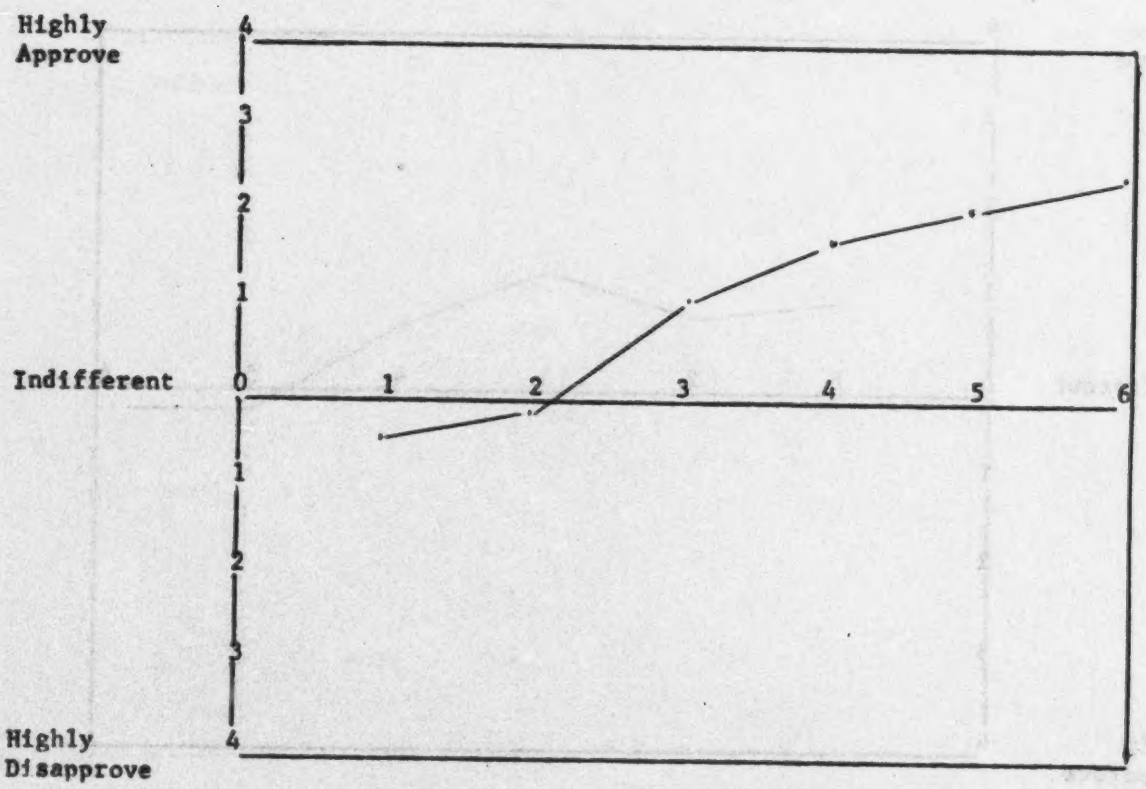
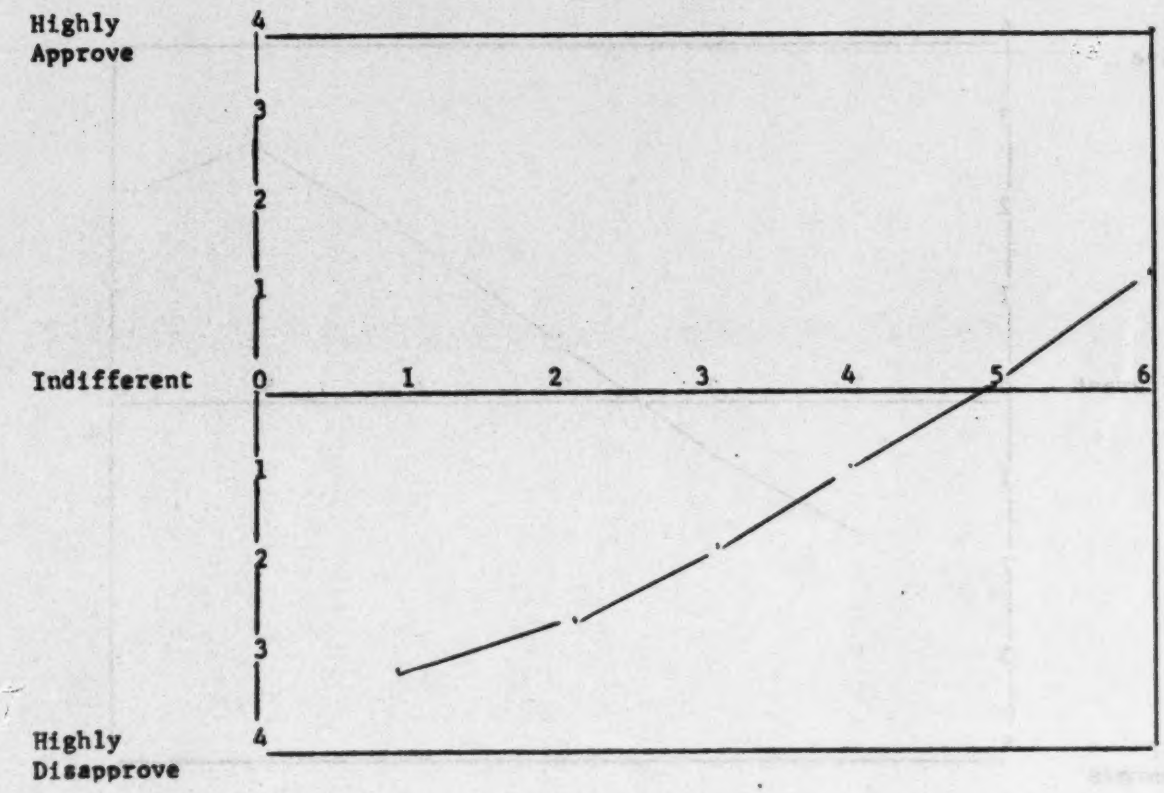


FIGURE 8

Norm 8: When the group is having difficulty in solving a problem, he spends time collecting information about and analyzing the difficulty, rather than working directly on the problem itself. (1 - high incidence of behavior, 6 - low incidence of behavior.)

February, 1970



June, 1970

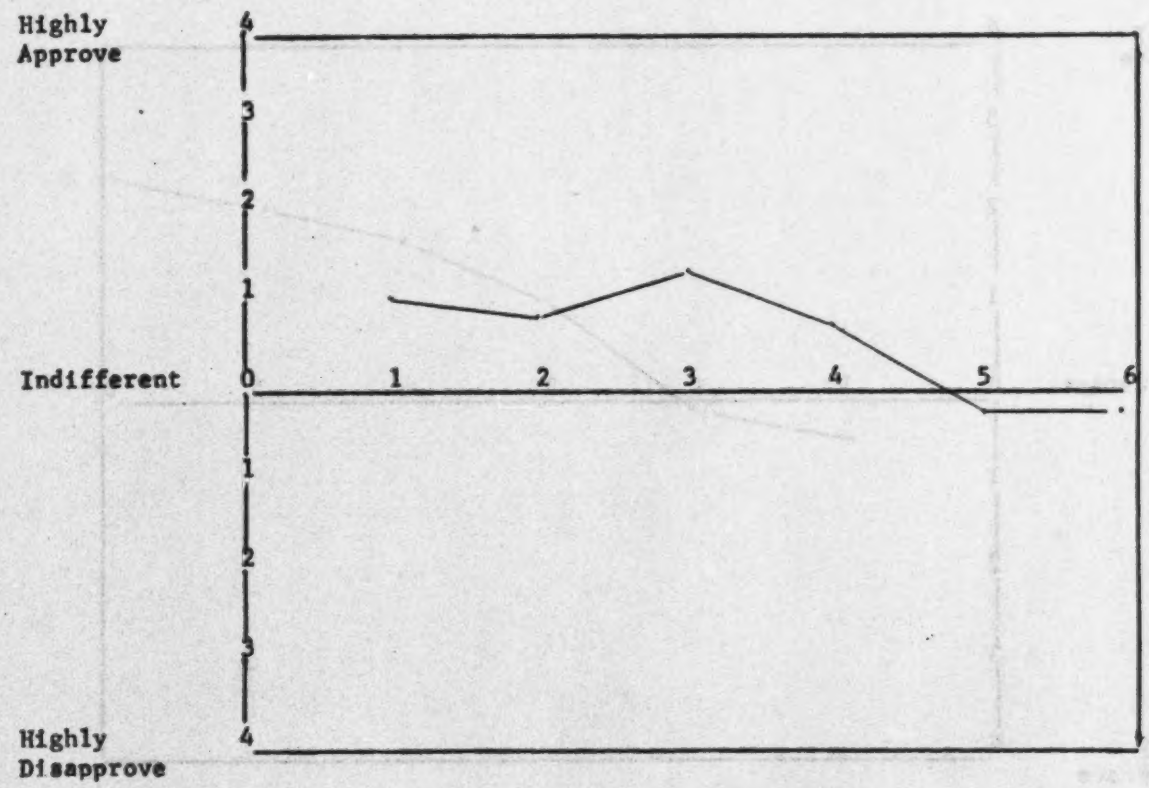
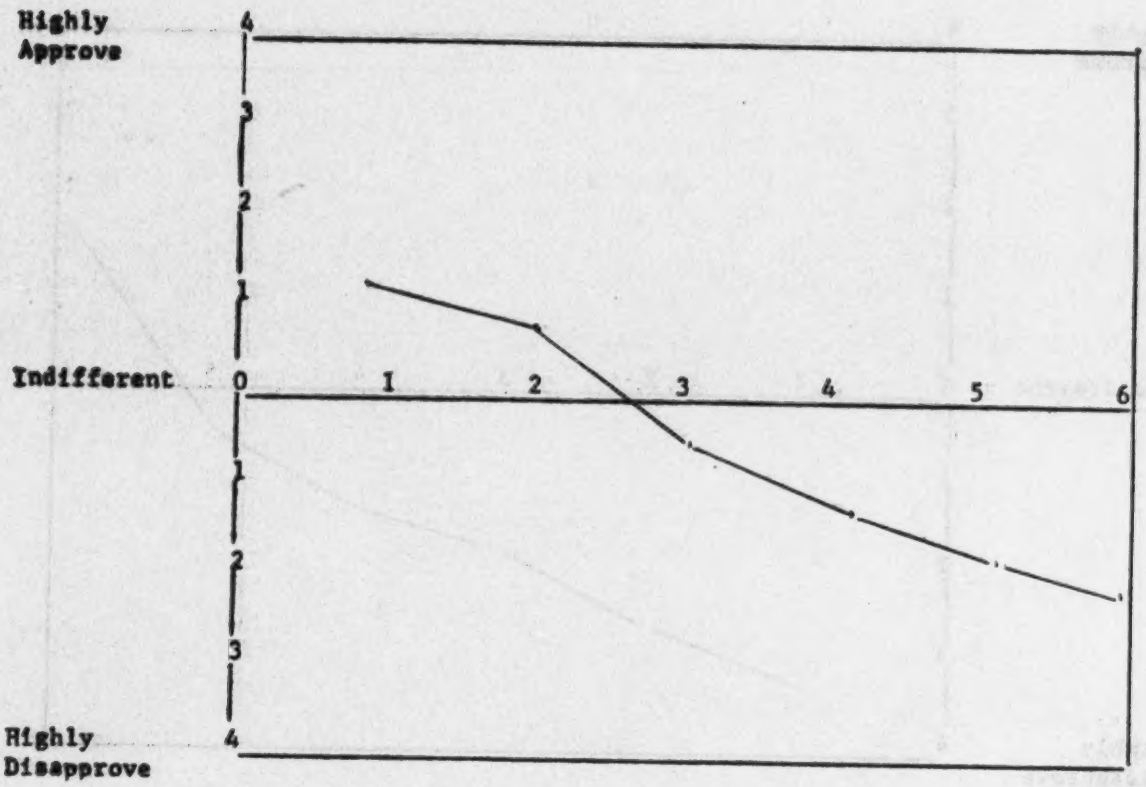


FIGURE 9

Norm 9: When he contributes an idea to the group discussion, he is concerned about what other members will think of him or how they will see him. (1 - low incidence of behavior, 6 - high incidence of behavior.)

February, 1970



June, 1970

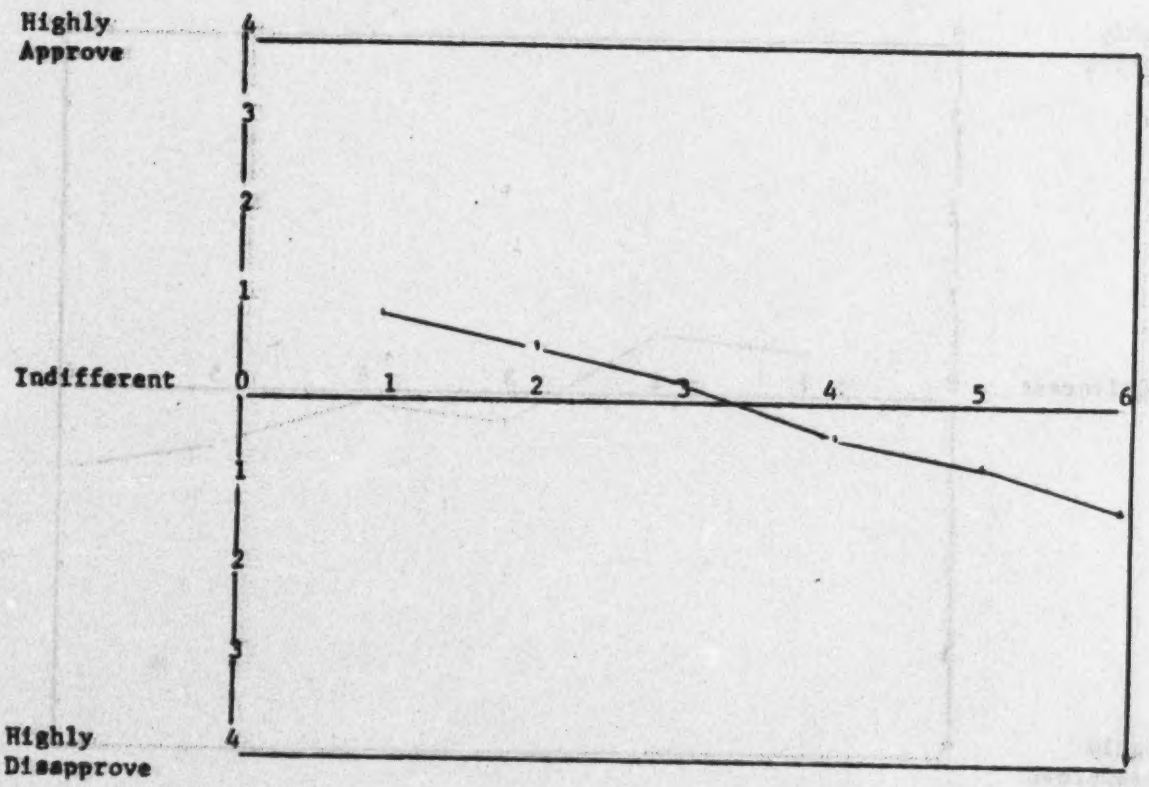
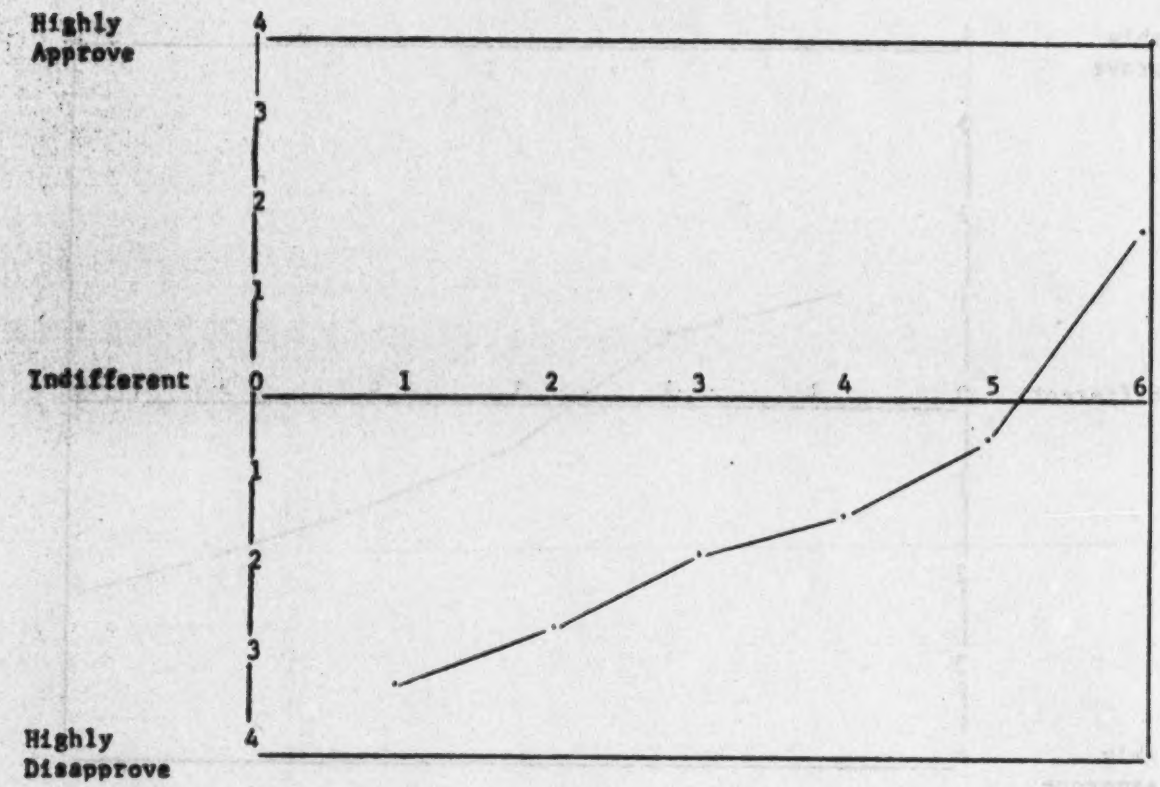


FIGURE 10

Norm 10: His remarks in the group are concerned with interpersonal relationships in the group or with group processes. (1 - high incidence of behavior, 6 - low incidence of behavior.)

February, 1970



June, 1970

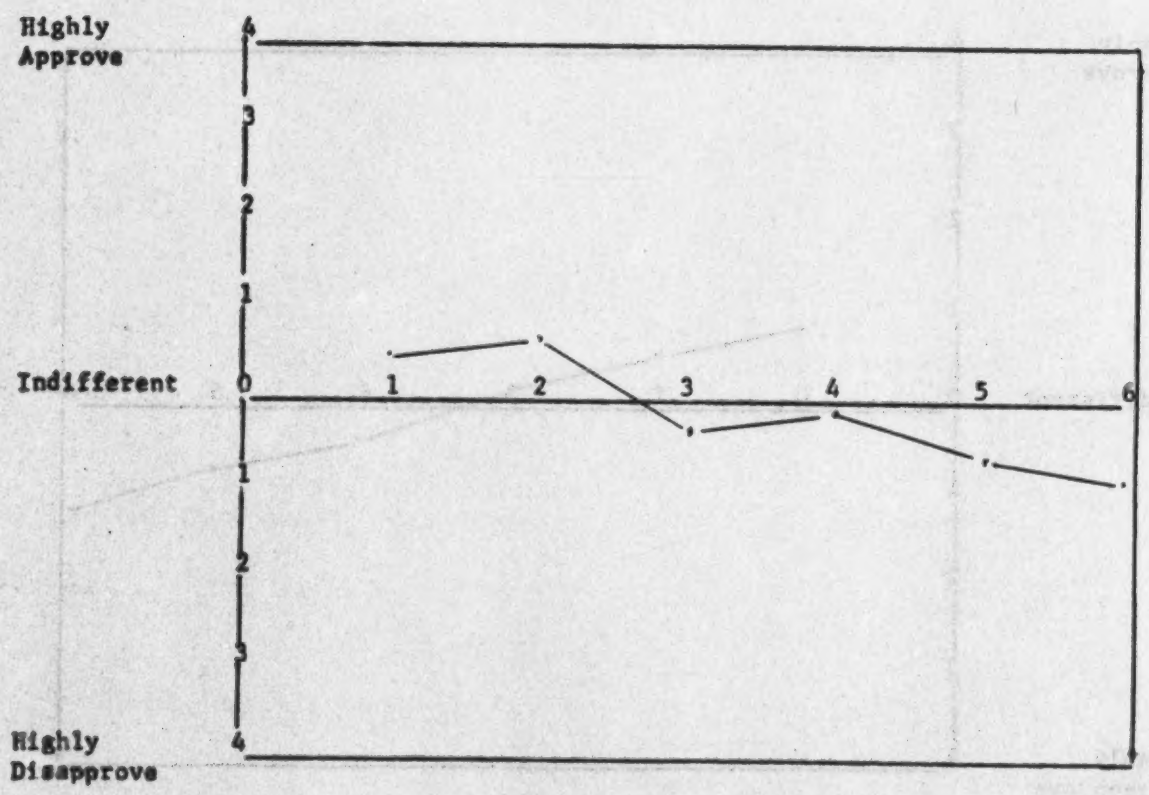
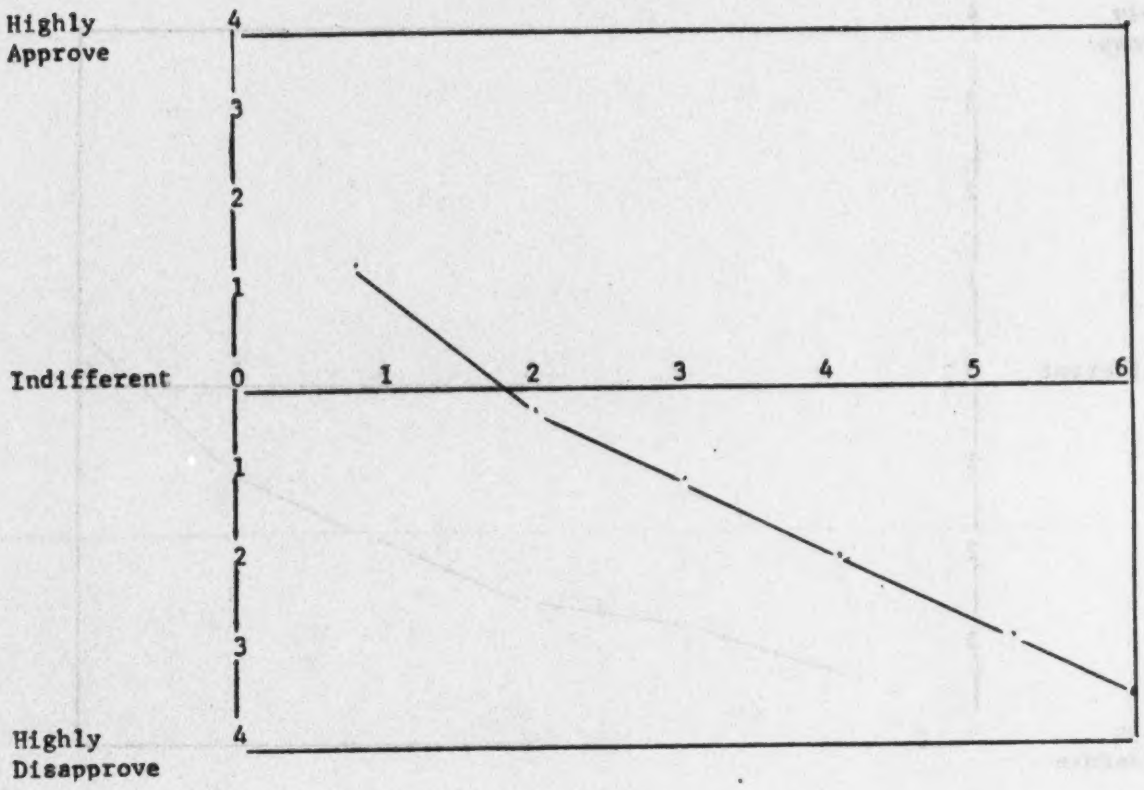


FIGURE 11

Norm 11: He points to particular members of the group and evaluates their behavior both inside and outside of the group (1 - low incidence of behavior, 6 - high incidence of behavior.)

February, 1970



June, 1970

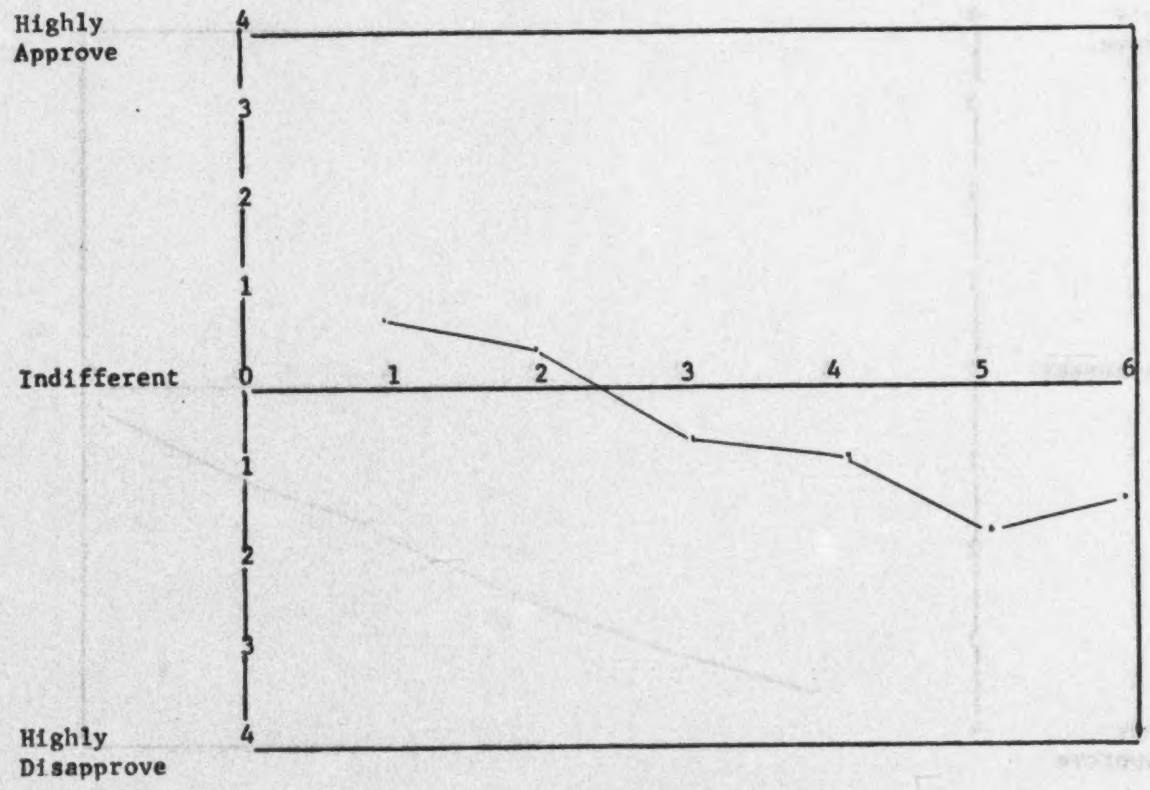
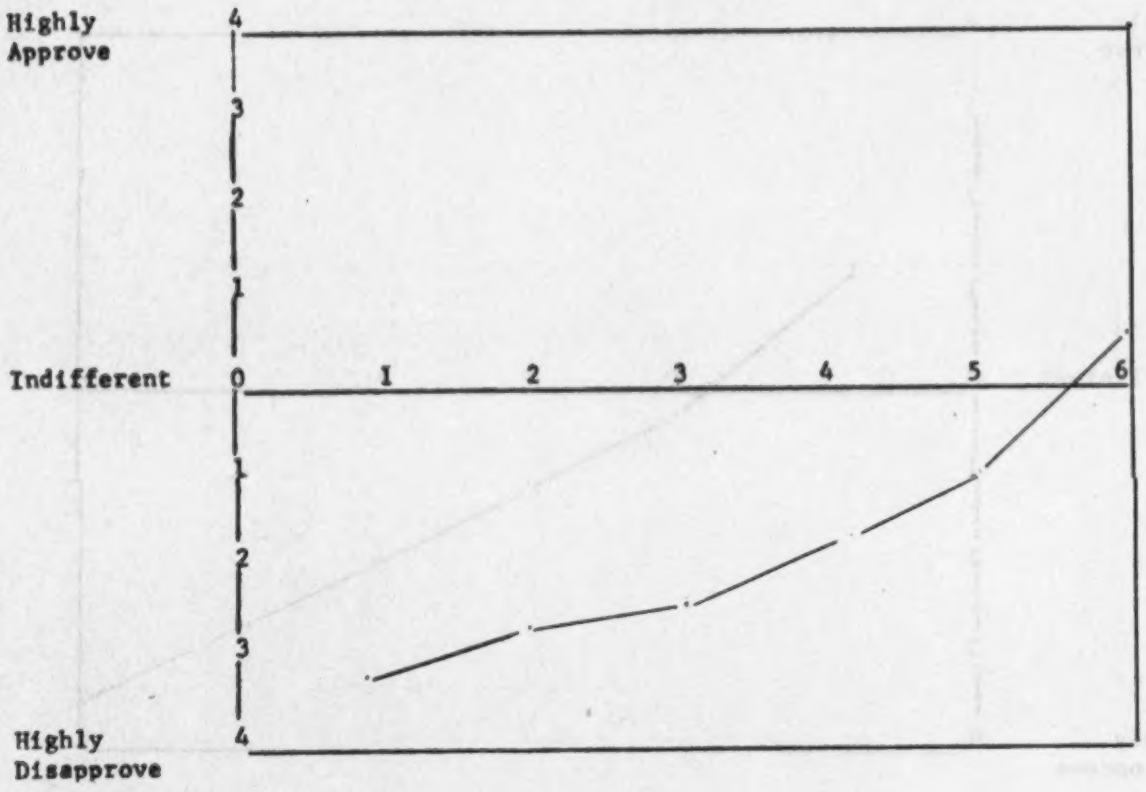


FIGURE 12

Norm 12: When he wants to speak, he interrupts the person speaking. (1 - high incidence of behavior, 6 - low incidence of behavior.)

February, 1970



June, 1970

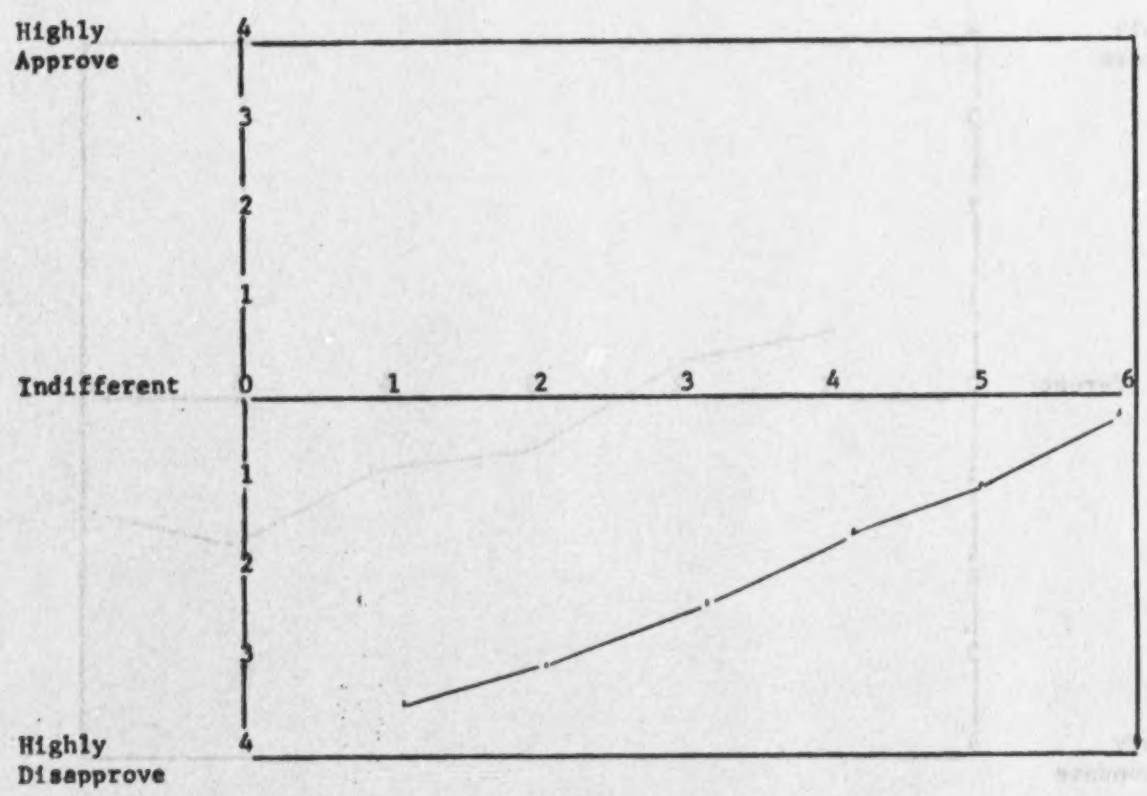


FIGURE 13

Return Potential Curve for Group Process Seminar for the Behavior Dimension: He leads the group discussion.
a=High incidence of the behavior
f=Low incidence of the behavior

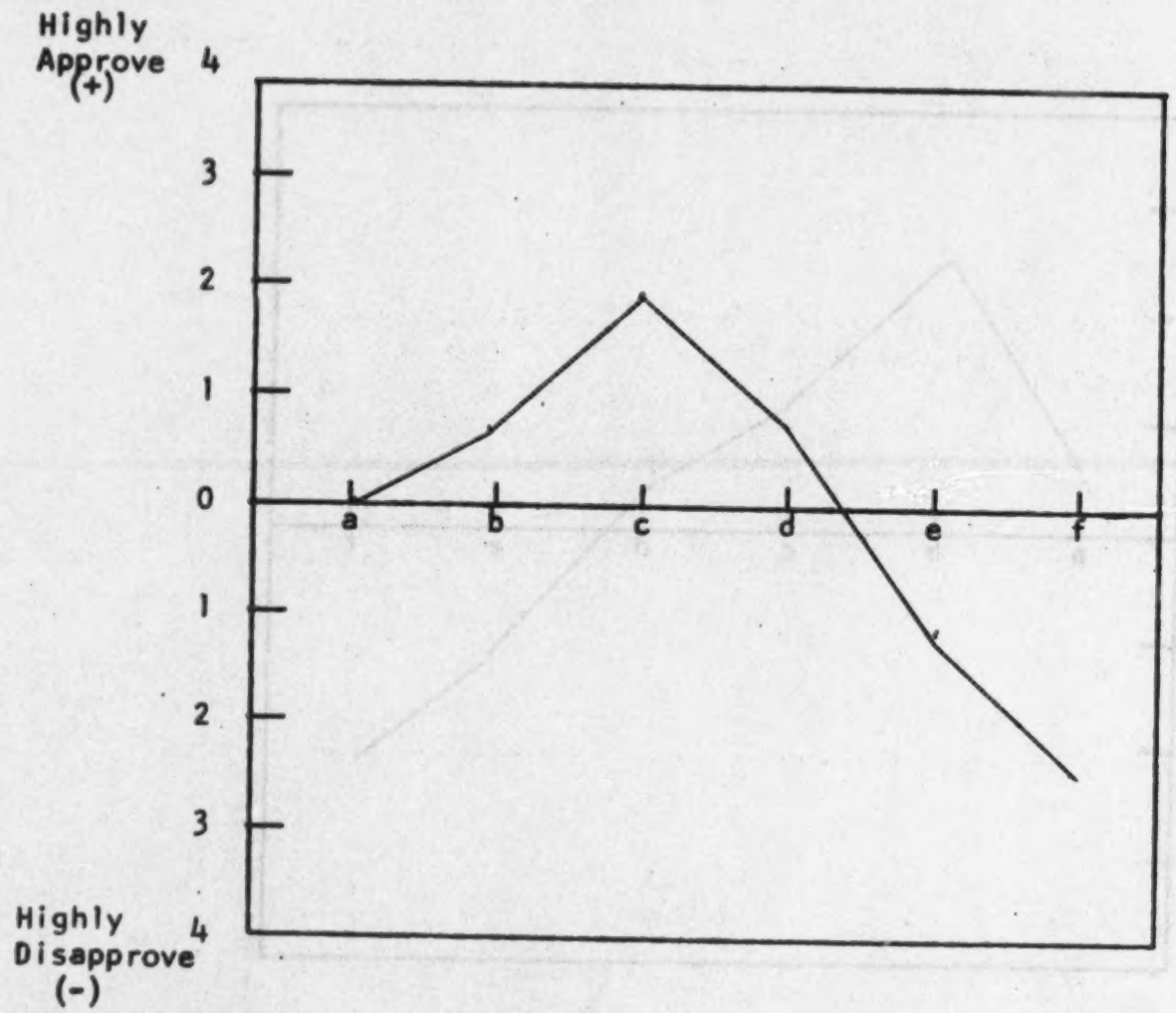


FIGURE 14

Return Potential Curve for Group Process Seminar for the Behavior Dimension: He discusses "group business" outside the group.
a=Low incidence of the behavior
f=High incidence of the behavior

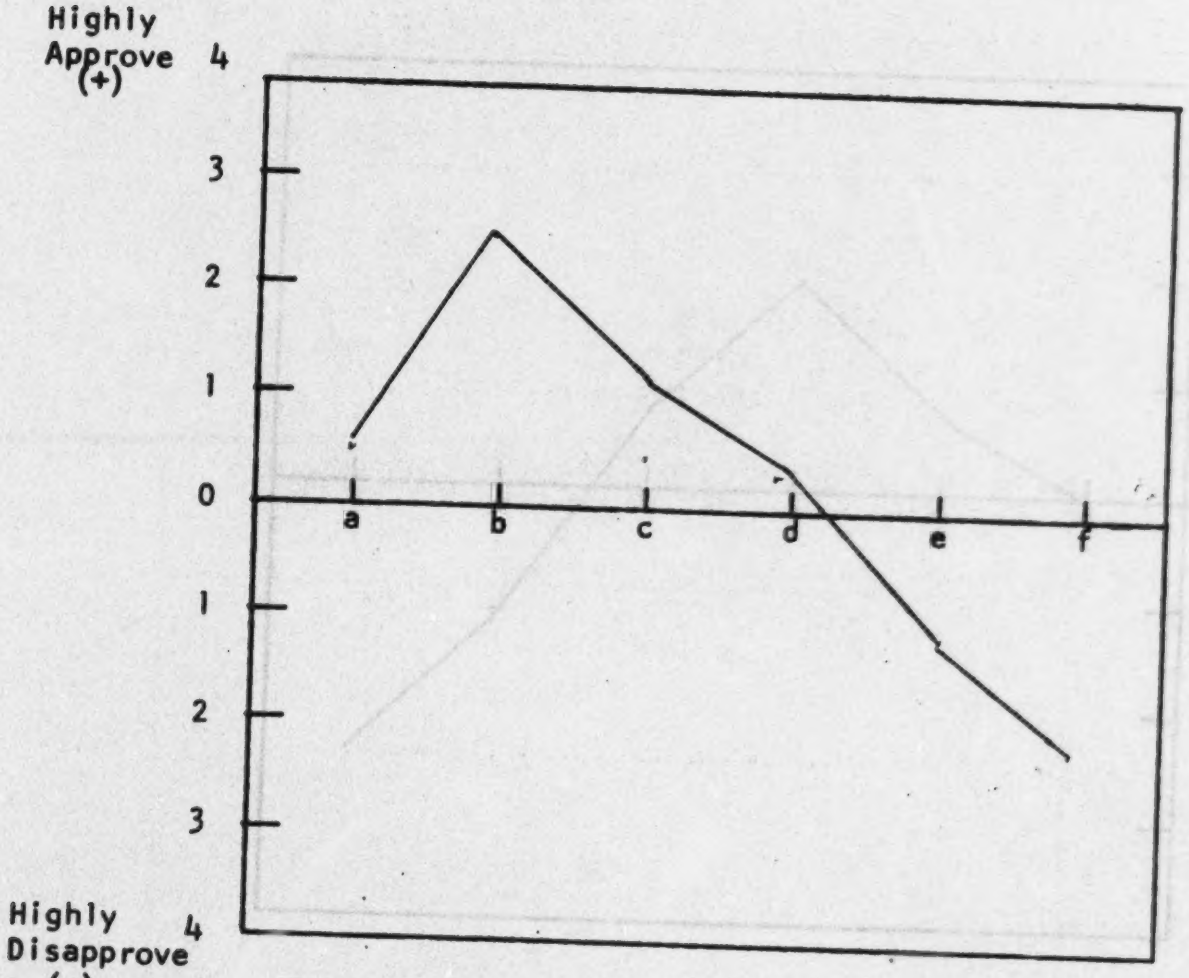
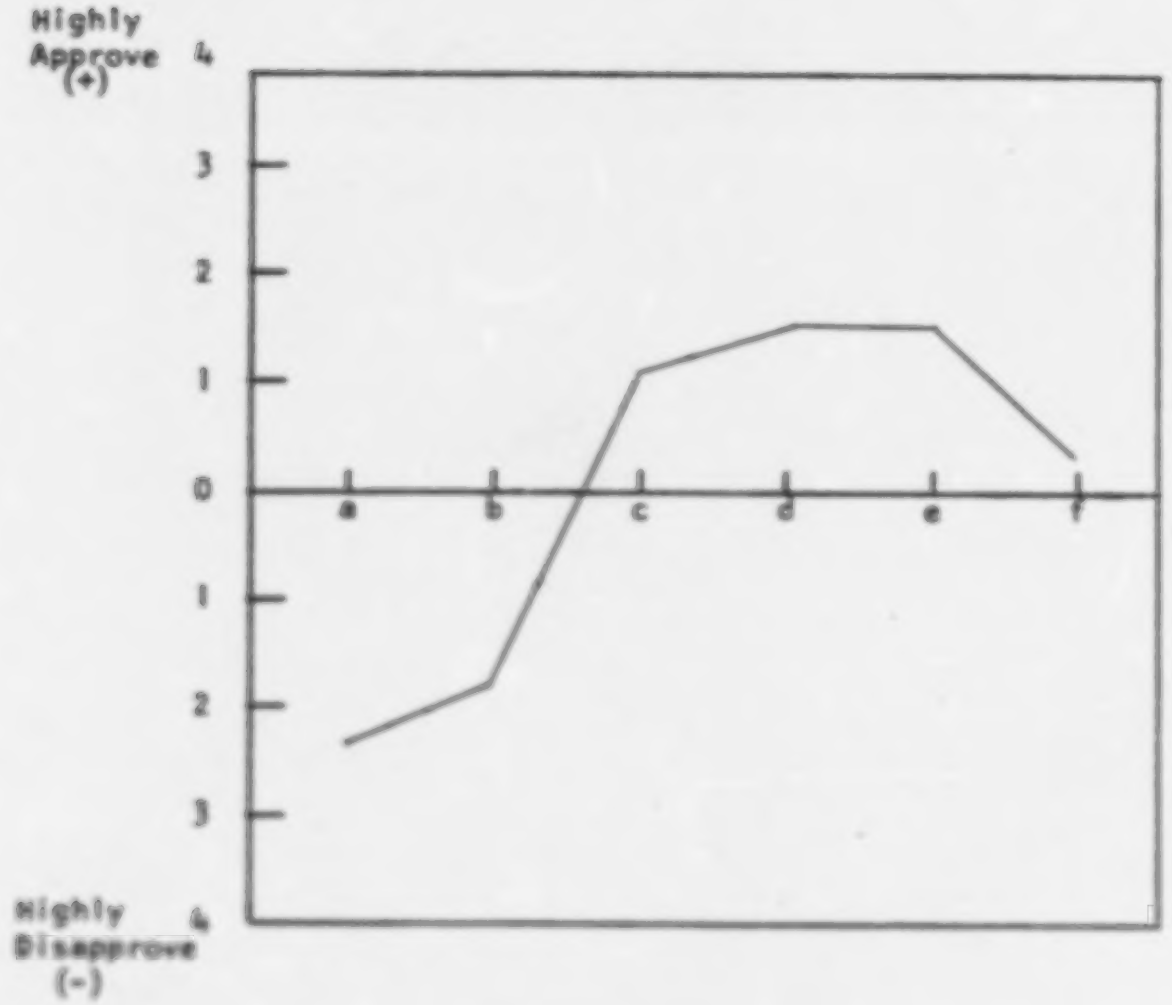


FIGURE 15

Return Potential Curve for Group Process Seminar for the Behavior Dimension: He offers some word of agreement or disagreement after other members' contributions.
a=Low incidence of the behavior
f=High incidence of the behavior



APPENDIX V

TIME SERIES ANALYSIS

APPENDIX V

TIME SERIES ANALYSIS[1]

Introduction

Unfortunately, we find ourselves caught in the relevance-precision dilemma that surrounds much institutional research. The more we attempt to control, manipulate and impose conditions which allow for more confidence and greater precision in what we say, the less relevant what we say becomes to phenomena which freely occur. We searched for a method which will allow us to describe the operation of certain variables, as they normally or freely occur, in an intentional community for chronic mental patients (Lodge). Had we employed classical experimental methods, allowing us to make more precise statements about the operation of those variables, we probably would have so changed the nature of the operation of those variables that what we would have to say about them would no longer be relevant to a Lodge program.

Early in the project we became intrigued with employing an analytic strategy frequently employed in some of the "hard" sciences, such as political science and economics, especially with freely occurring measures. This strategy is time series analysis.

A time series analysis was attempted during this project for two sets of reasons. First, time series analysis may be executed "in process." By this we mean that the analysis calls for the periodic recording of information, with the opportunity to employ that information while a given project, such as the Lodge program, is on-going. We believe that some mechanism is desirable whereby

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[1]Carl E. Larson, Ph. D., Director of Graduate Studies, Speech Department, University of Denver, Denver, Colorado, designed, carried out and reported the results of this time series test. This is a verbatim copy of his results.

one could take periodic "readings" of men in a Lodge, assess the individual's progress and degree of adjustment to the Lodge, determine whether or not the individual is encountering difficulties which are likely to become severe problems for him, and ultimately to judge whether or not intervention directed toward resolving future problems is necessary. Such procedures would obviously be potentially insightful in a research sense, but perhaps more importantly, such procedures might prove extremely useful in the administration of institutional programs such as an intentional community for chronic mental patients. Primarily because of these practical concerns, we decided to attempt the application of time series analysis to this Lodge project, without intervening at any point in the analysis. We simply wanted to see whether or not it would prove useful.

The second set of reasons for attempting a time series analysis concerns the conditions under which this type of analysis is considered appropriate. Implicit in Campbell and Stanley's discussing time series is the identification of three conditions appropriate to the use of this strategy.[2] (1) When controls are not possible. In other words, we are working with freely occurring variables. We want to understand how these variables operate in the Lodge setting, and which of these might be more useful or informative. (2) When time series analyses may be added to the research strategies of a project without requiring any additional data gathering procedures. Campbell and Stanley's comment on this point is instructive: "Furthermore, this design is particularly appropriate to those institutional settings in which records are regularly kept and thus constitute a natural part of the environment."[3] Thus,

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[2]Donald P. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Company, 1963).

[3]Ibid., p. 41.

we could test this analytic strategy without requiring any change in assessment procedures or the conduct of the Lodge program. (3) When the opportunity for replication is great. It is relatively easy for other individuals involved in similar research and demonstration projects to employ time series analyses. The ease with which they may be replicated commend them as a potentially integrating set of research formats.

The Basic Strategy

Every individual residing in the Lodge between December, 1969, and August, 1970, served as a potential subject for the time series analysis. A separate chart was prepared for each individual. The chart was divided into columns, each column representing a different month. Likewise, each chart was divided into rows, each row representing a 100 millimeter scale. Any given variable is plotted month by month for a given subject. A given subject's score on a specific variable for one month is plotted according to the following rules. (1) The 100mm scale represents the possible range of scores for that variable. (2) The subject's actual score on that variable is plotted by finding the point on the 100mm scale where the actual score would be located, given that 0 represent the lowest possible score on the variable and 100 represents the highest possible score on that variable.

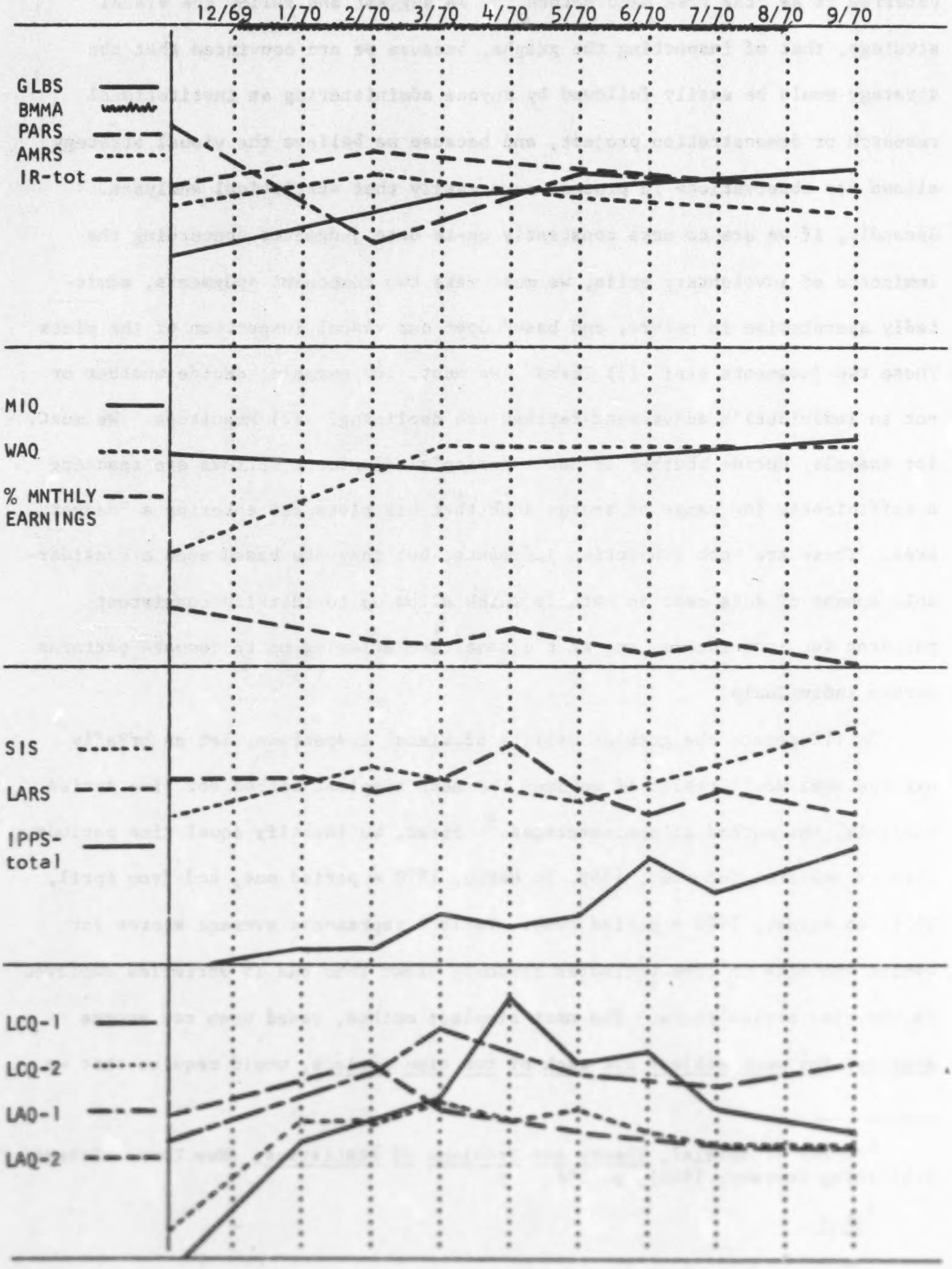
Similar variables were plotted in the same row. Adjustment ratings were plotted together; sociability measures were plotted together, etc. If you examine Figure 1, you may discern how a set of time series plots are set up. (Bear in mind that the original plots were made on 24" x 24" sheets. They have been reduced considerably for illustrative purposes in the present text.) The plots in this figure cover the months from December, 1969, to August, 1970. The variables are grouped into four classes: (1) the top row represents the

plotting of the adjustment ratings together on the same 100mm scale; (2) the second row represents the plotting of the work indices; (3) the third row represents the plotting of the sociability indices; and, (4) the bottom row represents the plotting of the "structural" measures, communication and affect. You will note that the way these measures are grouped is roughly equivalent to the results of the two factor analyses which were described earlier as a part of the overall attempt to identify the basic underlying dimensions in the pool of variables. Thus, the variables selected for inclusion in the time series plots were those which, on the basis of the preceding analyses, had been judged to be potentially the most informative of the measures we were collecting. You may also appreciate, following your inspection of Figure 1, the need to employ some such device as a 100mm scale to make the plots visually comparable.

In summary, then, we are now capable of identifying for any given month, and for any given subject, his score on any given variable, where he stands with respect to lowest and highest scores on that variable and where he has been in the months preceding. Now we reach the point where our strategy is directed toward a specific end. We are interested in judging, for any given individual at any given time, whether or not he is progressing "satisfactorily" or whether he is in danger of being involuntarily exited by the other members of the group. Consequently, we deviate from the usual strategy associated with time series analysis. The usual strategy is a "forecasting" one, wherein the attempt to predict values on certain indicators from knowing past values on these same indicators. Our strategy, however, is to infer from the pattern of scores whether or not a person's status in the group is in jeopardy.

Several points are now in need of explication. First, our strategy is a visual rather than statistical one. We are following the strategy generally

FIGURE 1
Facsimile of a Representative Time Series Chart



referred to as "the free hand method."[4] We suggest and follow the visual strategy, that of inspecting the graphs, because we are convinced that the strategy would be easily followed by anyone administering an institutional research or demonstration project, and because we believe the visual strategy allows for observations in process more easily that statistical analyses. Secondly, if we are to make constantly up-to-date judgments concerning the imminence of involuntary exits, we must make two component judgments, admittedly speculative in nature, and based upon our visual inspection of the plots. These two judgments are: (1) Trend. We must, for example, decide whether or not an individual's adjustment ratings are declining. (2) Magnitude. We must, for example, decide whether or not a person's adjustment ratings are reaching a sufficiently low range of scores such that his plots are entering a "danger" area. These are both subjective judgments, but they are based upon a considerable amount of data cast in methods which allow up to identify consistent patterns for individuals, and at the same time allowing up to compare patterns across individuals.

To illustrate the greater utility of visual inspection, let us briefly examine what would result if we used the next simplest method for time series analysis, the method of semi-averages.[5] First, we identify equal time periods, (let us say from December, 1969, to March, 1970 = period one, and from April, 1970, to August, 1970 = period two). Table 1 represents average scores for twelve subjects on five variables randomly drawn from the 15 variables employed in the time series plots. The next simplest method, based upon raw scores averaged for each subject for each of two time periods, would require that we

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[4]Murray R. Spiegel, Theory and Problems of Statistics, (New York: Schaum Publishing Company, 1961), p. 286.

[5]Ibid.

TABLE I
Semi-Averages for Five Variables

SUBJECTS	AMRS		IR		SIS		PAY		LARS	
	A	B	A	B	A	B	A	B	A	B
12	DM	53.0	DM	60.0	DM	78 5	3.0	8.3	58.0	63.8
14	73.0	76.5	67.0	65.5	72.0	77.0	10.0	9.7	68.5	67.5
21	51.5	75.0	72.0	76.0	80.0	83.0	6.0	8.7	53.5	68.5
27	54.5	59.0	68.5	61.0	76.5	70.0	7.7	6.0	64.0	59.3
29	54.5	66.0	76.5	67.0	83.5	67.0	12.0	7.3	60.0	62.3
37	76.5	84.0	72.0	61.0	75.0	63.5	8.3	9.7	63.8	65.3
38	44.0	48.5	54.0	42.5	56.5	61.5	5.3	4.0	43.8	46.8
44	39.0	42.5	DM	DM	66.5	56.5	13.7	8.0	61.8	52.0
54	47.0	65.5	64.5	50.5	78.5	58.0	5.3	6.3	70.8	66.7
62	51.5	50.0	55.0	39.5	65.0	57.0	6.3	4.0	50.0	45.8
64	47.0	50.0	51.0	40.0	53.5	50.0	6.3	5.0	70.5	57.3
91	67.5	62.5	77.0	68.0	88.5	90.0	5.3	7.0	57.0	74.5

DM=Data Missing
A=Period 1 (12/69 to 3/70)
B=Period 2 (4/70 to 8/70)

estimate trends in subject scores by inspecting Tables three times larger than Table 1. After inspecting Table 1, you may appreciate the difficulties we would encounter in formulating judgments of individuals, following this method.

A Practical Test of the Utility of Time Series Analysis

We attempted a practical test of the utility of time series analysis by setting up the following conditions. (1) Between December, 1969, and August, 1970, we identified twelve individuals whose residence in the Lodge was of sufficient length to allow us to generate time series plots. For these twelve individuals, we plotted scores on the 15 variables identified in Figure 1. (2) The plots for these twelve individuals were randomly stopped in June, July, and August, 1970. We stopped the plots in this manner so that individuals predicting exits on the basis of the plots would have no clues related to how far the plots were extended. (3) We asked two judges to examine the plots for these twelve individuals and to formulate one basic judgment. That judgment was whether or not, for the two months immediately following the cessation of plots for a given individual, that individual would remain in the Lodge or would be involuntarily exited from it. (4) Subjects were coded by numbers. The judges did not know which subject was being judged at any given time, except by number. The judges were familiar with the Lodge program and the variables being plotted.

The judges inspected the plots for the twelve individuals and by concensus determined whether or not a given individual would be involuntarily exited from the Lodge at some point during the two months following the cessation of his plots. The judges were correct in eleven out of twelve predictions. For the twelve individuals, the judges predicted that exits would occur with three of these individuals. In all three cases exits did occur during the two month

period immediately following the cessation of the plots. For nine individuals, the judges predicted that no exits would occur in the two month period immediately following the cessation of the plots. The single error occurred in that the judges failed to predict one impending exit.

Two plots will serve to illustrate the nature of the judges' predictions. (Remember that the plots included herein are much reduced facsimiles of the original ones.) Figure 2 represents a series of plots for an individual judged to be in danger of exiting involuntarily. His adjustment ratings are declining consistently. His communication and affect acores are declining somewhat. His participation in meetings (IPPS) is consistently low. His work output (percent of monthly earnings) is relatively low and has declined by more than one-half over the last three months of the plot. In summary, the individual shows consistent negative changes in scores and has reached a point in some of the more crucial scores where the issue of his continued stay in the Lodge is likely to be raised by the other members.

Contrast Figure 2 with Figure 3. Figure 3 represents a series of plots for an individual judged to be progressing "satisfactorily" and not in any immediate danger of being exited involuntarily. His adjustment ratings are high and reasonably stable. His percent of monthly earnings is reasonably stable and represents a "fair" share of work output. His sociability scores are reasonably high. His communication and affect scores are moderate, but show no marked decline in the six or seven months preceding the cessation of plotting. The individual seems likely to continue his residency in the Lodge, and not to be in any immediate danger of exiting.

These two plots were selected as representative of the plots associated with the two types of decisions. They were not selected to represent obvious or extreme cases.

FIGURE 2
Facsimile of a Representative Time Series Chart

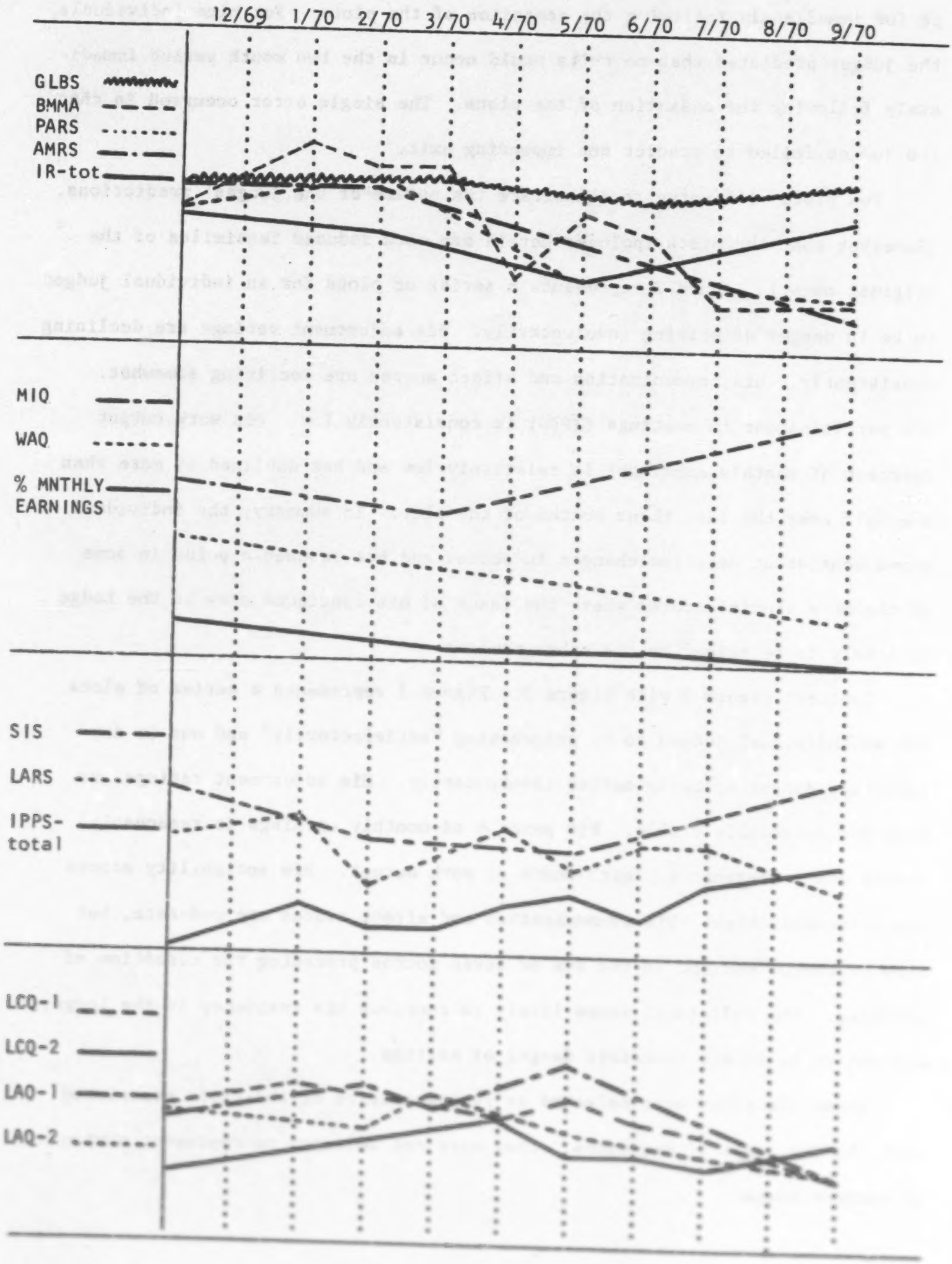
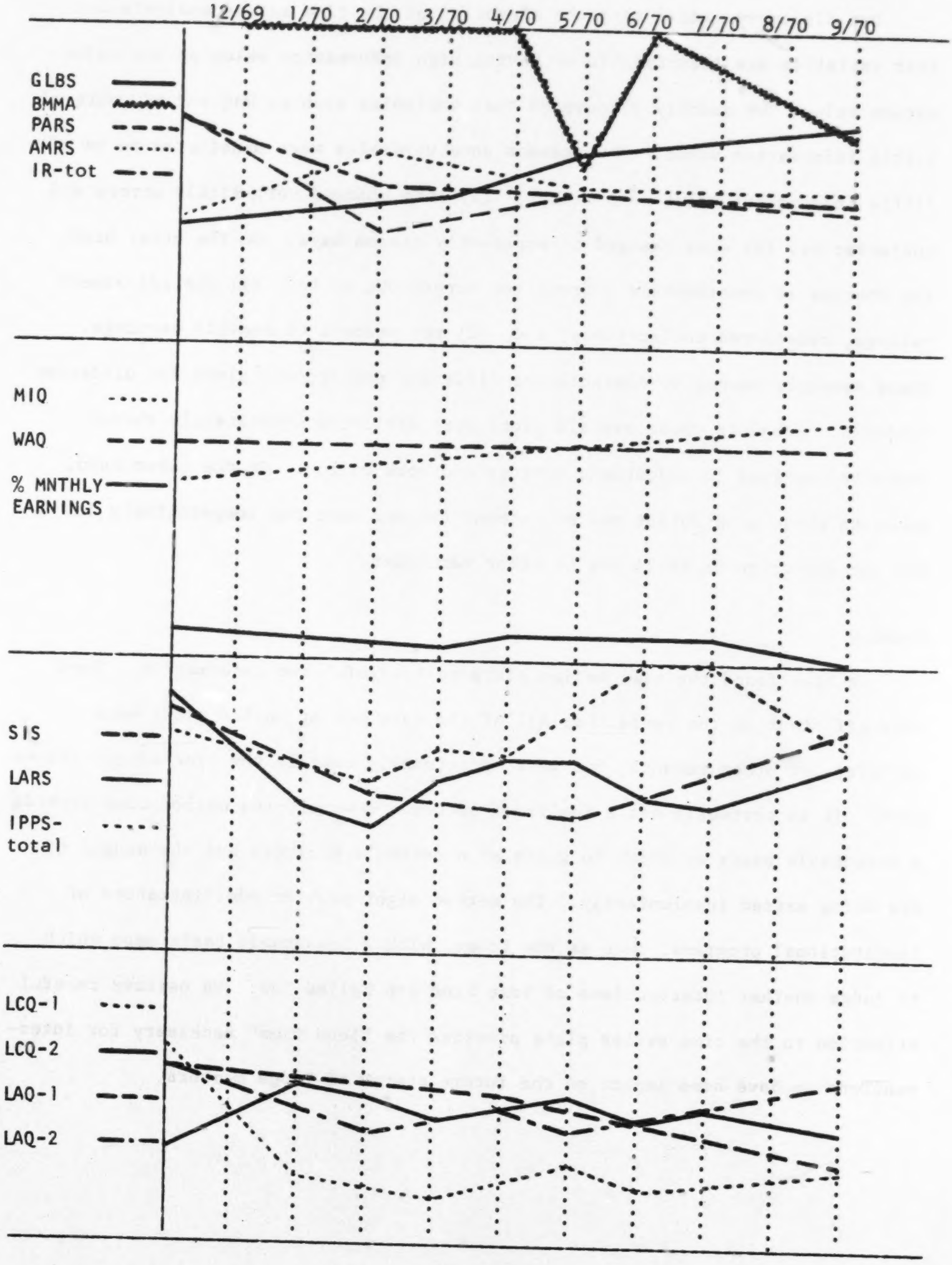


FIGURE 3
Facsimile of a Representative Time Series Chart



One discovery made during the executing of the time series analysis was that variables are identifiable as having high information value or low information value. We quickly discovered that variables such as WAQ and MIQ were of little information value. The reasons some variables were considered to be of little information value were either: (1) they changed very little across all subjects; or, (2) they changed in apparently random ways. On the other hand, two sources of considerable information turned out to be: (1) the adjustment ratings, considered collectively; and, (2) the percent of monthly earnings. These measures seemed to characterize different patterns of plots for different subjects. Subjects whose overall plots were declining consistently showed dramatic declines in adjustment ratings and work output. On the other hand, subjects whose work output and adjustment ratings were not comparatively low did not appear to be declining on other variables.

Summary

We have found the time series plots to be useful and informative. They were efficient in the sense that all of the data making up the plots were gathered for other reasons, but were additionally cast in the time series framework. It is obviously not a foolproof method. However, the method does provide a reasonable basis on which to guess at a person's progress and the danger of his being exited involuntarily. The method might provide administrators of institutional programs, such as the Lodge, with a reasonable basis upon which to judge whether interventions of some kind are called for. We believe careful attention to the time series plots provides the "lead time" necessary for interventions to have some impact on the future status of Lodge members.